

	AND	FOO	FLOOR CLEAN OUT	OFF	OFFICE
A	ANGLE	FD	FLOOR DRAIN	OPG / OPNG	OPENING
A/C	AIR CONDITIONER / CONDITIONING	FDN	FOUNDATION	OPP	OPPOSITE
ABV	ABOVE	FE	FIRE EXTINGUISHER	OZ	OUNCE
ACCES	ACCESSORIES	FEC	FIRE EXTINGUISHER CABINET		
ACSDR	ACCESS DOOR	FEC (R)	FIRE EXTINGUISHER CABINET, RECESSED	PART	PARTIAL
ACSFRL	ACCESS FLOOR			PAT	PATTERN
ACST / ACOUS	ACOUSTICAL	FEC (SR)	FIRE EXTINGUISHER CABINET, SEMI RECESSED	PBD	PARTICLE BOARD
ACT	ACOUSTICAL CEILING TILE	FEW	FIRE EXTINGUISHER, WALL MOUNTED	PC / PCC	PRECAST CONCRETE
AD	AREA DRAIN	FF	FINISHED FLOOR	PED	PEDESTAL
ADDL	AMERICANS WITH DISABILITIES ACT	FGL	FIBERGLASS	PER	PERIMETER
ADDL	ADDITIONAL	FIN	FINISHED()	PERF	PERFORATED
ADDUM	ADDENDUM	FIXT	FIXTURE	PERP	PERPENDICULAR
ADJ	ADJUSTABLE / ADJACENT	FL	FLOOR	PF	PRE-FINISHED
ADMIN	ADMINISTRATION	FLASH	FLASH(ING)	PP	POURED-IN-PLACE
AFC	ABOVE FINISHED COUNTER	FLUOR	FLUORESCENT	PL	PROPERTY LINE
AFF	ABOVE FINISHED GRADE	FOC	FACE OF CONCRETE	PL	PLATE
AFG	ABOVE FINISHED GRADE	FOF	FACE OF FINISH	PLAM	PLASTIC LAMINATE
AFS	ABOVE FINISHED SLAB	FOM	FACE OF MASONRY	PLAS	PLASTER
AGGR	AGGREGATE	FOS	FACE OF STUDS	PLYWOD	PLYWOOD
AHR	ANCHOR	FOW	FACE OF WALL	PMF	PRESSED METAL FRAMES
AHU	AIR HANDLING UNIT	FP	FIREPROOF	POP	POINT OF PRESENCE
AL / ALUM	ALUMINUM	FPL	FIREPLACE	PR	PAIR
ALNMT	ALIGNMENT	FR	FRAME	PRCST	PRE-CAST
ALT	ALTERNATE	FRC	FIBER REINFORCED CONCRETE	PREFAB	PREFABRICATED
ANOD	ANODIZED	FRGP	FIBER REINFORCED GYPSUM PLASTER	PROP	PROPERTY
AP	ACCESS PANEL	FRT	FIRE RETARDANT TREATED	PRT	PORCELAIN TILE
APC	ACOUSTICAL PANEL CEILING	FS	FLOOR SINK	PSF	POUNDS PER SQUARE FOOT
APPROX	APPROXIMATELY	FTG	FOOTING	PSI	POUNDS PER SQUARE INCH
APP/VD	APPROVED	FURR	FURRING	PT	POINT
ARCH	ARCHITECT(URAL)	FUT	FUTURE	PTD	PAPER TOWEL DISPENSER
ASPH	ASPHALT			PTD/WR	PAPER TOWEL DISPENSER & WASTE RECEPTACLE
ASTM	AMERICAN SOCIETY FOR TESTING MATERIALS	GA	GAUGE		PRESSURE TREATED DOUGLAS FIR
		GALV	GALVANIZE(D)	PTN	PARTITION
AUTO	AUTOMATIC	GB	GRAB BAR	PTR	PAPER TOWEL RECEPTACLE
AVG	AVERAGE	GC	GENERAL CONTRACTOR	PVC	POLYVINYL CHLORIDE
		GL	GLASS / GLAZING		
BD	BOARD	GND	GROUND	Q	QUARTZ
BET	BETWEEN	GR	GRADE	QT	QUARRY TILE
BG	BUMPER GUARD	GRV	GRAVEL	QTY	QUANTITY
BIVP	BUILDING INTEGRATED PHOTO-VOLTAICS	GT	GLASS TILE		
BITUM	BITUMINOUS	GYP	GYPSUM	R	RISER
BL	BLACK	GYP BD	GYPSUM BOARD	RAD	RADIUS
BLDG	BUILDING			RB	RUBBER BASE
BLK	BLACK	HB	HOSE BIB	RC	REFLECTED CEILING PLAN
BLKG	BLOCKING	HC	HOLLOW CORE	RD	ROOF DRAIN
BM	BLOCK	HCP	HANDICAPPED	REF	REFERENCE
BMS	BALANCE MAGNETIC SWITCH	HD	HEAVY DUTY	REFR	REFRIGERATOR
BOS	BOTTOM OF STEEL	HD	HARD	REG	REGISTER
BOT	BOTTOM	HDR	HEADER	REINF	REINFORCE(D)
BS	BOTH SIDES	HDWR	HARDWARE	REQ	REQUIRED
		HI	HIGH	RESIL	RESILIENT
		HMI	HOLLOW METAL	RESS	RESILIENT SHEET
CAB	CABINET	HMI	HOLLOW METAL INSULATED	REST	RESILIENT TILE
CAS	CASEWORK	HOR / HORIZ	HORIZONTAL	RET	RETAINING
CB	CATCH BASIN	HP	HIGH POINT	REV	REVISE / REVISION
CEM	CEMENT	HR	HANDRAIL	RFG	ROOFING
CER	CERAMIC	HR	HOUR	RFL	REFLECTED
CF	CUBIC FOOT	HT	HEIGHT	RH	RIGHT HAND
CG	CORNER GUARD	HVAC	HEATING / VENTILATION / AIR CONDITIONING	RM	ROOM
CH	CEILING HEIGHT			RO	ROUGH OPENING
CHAM	CHAMFER	HW	HARDWARE	RS	RUBBER SHEET FLOORING
CHBD	CHALKBOARD	HYD	HYDRANT	RST	RUBBER STAIR TREADS
CJ	CAST IRON			RSTR	RUBBER STAIR TREADS & RISERS
CJ	CONTRACTOR INSTALLED	ID	INSIDE DIAMETER	RT	RUBBER TILE
CIP	CAST IN PLACE	INCL	INCH / INCHES	RWD	REDWOOD
CJ	CONTROL JOINT	INCL	INCLUDE(D) / INCLUDING	RWL	RAIN WATER LEADER
CL	CENTER LINE	INSUL	INSULATE / INSULATION		
CLG	CEILING	INT	INTERIOR	S	SOUTH
CLO	CLOSET	JAN	JANITOR	SC	SOLID CORE
CLU	CLEAR	JT	JOINT	SCD	SEAT COVER DISPENSER
CMU	CONCRETE MASONRY UNIT			SHED	SCHEDULE
CO	CLEAN/CLEAR OUT			SCN	SCREEN
COL	COLUMN	KIT	KITCHEN	SCR	SCREEN
CONC	CONCRETE			SD	SOAP DISPENSER / STORM DRAIN
CONST	CONSTRUCTION	LAB	LABORATORY	SDC	SEALED CONCRETE
CONT	CONTINUOUS	LAM	LAMINATE(D)	SECT	SECTION
CORR	CORRIDOR	LAV	LAVATORY	SF	SQUARE FEET
CPR	COPPER	LB(S)	POUND(S)	SH	SHEET
CPT	CARPET(ED)(ING)	LF	LINEAR FOOT (FEET)	SHGT	SHEATHING
CT	CERAMIC TILE	LH	LEFT HAND	SHWR	SHOWER
CTR	COUNTER	LIB	LIBRARY	SIM	SIMILAR
		LKR	LOCKER	SND	SANITARY NAPKIN DISPENSER
DBL	DOUBLE	LNS	LINOLEUM SHEET	SNR	SANITARY NAPKIN RECEPTACLE
DEFS	DIRECT APPLIED EXTERIOR FINISH SYSTEM	LNT	LINOLEUM TILE	SOG	SLAB ON GRADE
DEG	DEGREE	LP	LOW POINT	SPEC	SPEC

		VWC	VINYL WALLCOVERING
UC	UNDERCUT		
UG	UNDERGROUND	W	WEST
UL	UNDERWRITER'S LABORATORY	W	WITH
UNF / UNFIN	UNFINISHED	W/O	WITHOUT
UON	UNLESS OTHERWISE NOTED	WC	WATER CLOSET
UPS	UNINTERRUPTIBLE POWER SUPPLY	WC/V	WALLCOVERING
UR	URINAL	W	WOOD
		WF	WIDE FLANGE
V	VOLT	WG	WIRE GLASS
VAC	VACUUM	WH	WIRE HOSE / HYDRANT
VB	VAPOR BARRIER	WI	WROUGHT IRON
VCT	VINYL COMPOSITION TILE	WIN	WINDOW
VENT	VENTILATE	WK	WORK
VERT	VERTICAL	WNSCT	WAINSCOT
VEST	VESTIBULE	WP	WATERPROOF(ING)
VIF	VERIFY IN FIELD	WPT	WORK POINT
VNR	VENEER	WR	WATER RESISTANT
VOL	VOLUME	WRR	WOOD RISER
VST	VINYL STAIR TREADS	WSD	WINDOW SHADING DEVICE
VSTR	VINYL STAIR TREADS & RISERS	WT	WEIGHT
VT	VINYL TILE		
VTR	VENT THRU ROOF	YD	YARD

 <p>WALL/PARTITION METAL STUD FRAMED</p>	 <p>RIGID INSULATION</p>
 <p>BATT INSULATION</p>	 <p>PLASTER, GWB, STUCCO, SETTING BEDS</p>
 <p>CONCRETE</p>	 <p>STEEL/METAL</p>
 <p>EARTH</p>	 <p>ROCK FILL</p>

1. DOOR LOCATIONS NOT DIMENSIONED ARE:
 - A. JAMB FACE 6" FROM FACE OF STUD
 - B. CENTER THE DOOR ON CENTER LINE OF ROOM OR CORRIDOR
 - C. 24" MIN. EXTERIOR AND 18" MIN. INTERIOR CLEAR BEYOND STRIKE EDGE OF A GATE OR DOOR ON THE SIDE TOWARDS WHICH IT SWINGS
2. LINE OF EXISTING GRADES, AS SHOWN ON THE BUILDING ELEVATIONS AND SECTIONS ARE APPROXIMATE. THEY ARE AT THE BUILDING FACE, OR ON THE SECTION END EXCEPT AS NOTED. VERIFY. FOR SPECIFIC INFORMATION SEE GRADING PLAN.
3. UNLESS OTHERWISE NOTED, PLAN DIMENSIONS ARE TO CENTERLINE OF COLUMNS, FACE OF CONCRETE OR CMU AND FACE OF GYPSUM BOARD FINISH.
4. REPETITIVE FEATURES ARE NOT DRAWN IN THEIR ENTIRETY AND SHALL BE COMPLETELY PROVIDED AS IF DRAWN IN FULL.
5. VERIFY ALL ROUGH-IN DIMENSIONS FOR EQUIPMENT PROVIDED IN THIS CONTRACT, OR BY OTHERS.
6. THE STRUCTURAL, MECHANICAL AND ELECTRICAL DRAWINGS ARE SUPPLEMENTARY TO THE ARCHITECTURAL DRAWINGS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CHECK WITH THE ARCHITECTURAL DRAWINGS BEFORE THE INSTALLATION OF STRUCTURAL, MECHANICAL AND ELECTRICAL WORK. SHOULD THERE BE A DISCREPANCY BETWEEN THE ARCHITECTURAL DRAWINGS AND THE ENGINEERING DRAWINGS, IT SHOULD BE BROUGHT TO THE CONTRACTING OFFICER'S ATTENTION FOR CLARIFICATION PRIOR TO INSTALLATION OF SAID WORK. ANY WORK INSTALLED IN CONFLICT WITH THE ARCHITECTURAL DRAWINGS SHALL BE CORRECTED BY THE CONTRACTOR AT HIS EXPENSE AND AT NO ADDITIONAL COST TO THE GOVERNMENT OR ARCHITECT.
7. SPECIFICATIONS, WHICH ARE BOUND SEPARATELY, ARE PART OF THESE CONTRACT DOCUMENTS.
8. DO NOT SCALE DRAWINGS. GENERAL CONTRACTOR SHALL VERIFY ALL DIMENSIONS, GRADES, CONDITIONS AT SITE PRIOR TO COMMENCING THE WORK, AND REPORT ANY DISCREPANCIES TO TO THE CONTRACTING OFFICER IN WRITING. DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALES SHOWN ON DRAWINGS. CONTRACTOR SHALL NOTIFY CONTRACTING OFFICER WHERE DISCREPANCIES OCCUR BETWEEN DRAWINGS, GENERAL NOTES AND SPECIFICATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ACCURATE PLACEMENT OF THE BUILDING ON THE SITE.
9. ALL SYMBOLS AND ABBREVIATIONS USED ON THE DRAWINGS ARE CONSIDERED TO BE STANDARDS. IF THE CONTRACTOR HAS ANY QUESTIONS REGARDING SAME, OR OTHER EXACT MEANING, THE CONTRACTING OFFICER SHALL BE NOTIFIED FOR CLARIFICATION.
10. CONTRACTOR SHALL PROVIDE TEMPORARY EXIT SIGNS TO ASSURE A MEANS OF EGRESS DURING CONSTRUCTION.
11. GENERAL CONTRACTOR SHALL COORDINATE SITE PLUMBING, DRAINAGE, ELECTRICAL, TELEPHONE WORK AND EXISTING UTILITIES TO PROVIDE A COMPLETE OPERATING SYSTEM.
12. CONTRACTOR SHALL VERIFY ALL CONCRETE AND MASONRY OPENINGS IN THE FIELD PRIOR TO FABRICATION OF DOORS, WINDOWS, LOUVERS AND FRAMES.
13. CONTRACTOR SHALL VERIFY SIZES AND LOCATION OF MECHANICAL EQUIPMENT PADS AND BASES AS WELL AS POWER AND WATER OR DRAIN INSTALLATION WITH EQUIPMENT MANUFACTURERS BEFORE PROCEEDING WITH THE WORK. CHANGES TO ACCOMMODATE FIELD CONDITIONS OR SUBSTITUTIONS SHALL BE MADE WITHOUT ADDITIONAL CHARGE TO THE GOVERNMENT.
14. CONTRACTOR SHALL REVIEW THE LOCATION OF ALL FIRE LIFE SAFETY DEVICES WITH THE FIRE INSPECTOR AND THE CONTRACTING OFFICER FOR ON SITE APPROVAL PRIOR TO INSTALLATION.
15. OFFSET STUDS WHERE REQUIRED SO THAT FINISH WALL SURFACES WILL BE FLUSH.
16. INSTALL ALL METAL CORNER BEADS TO ALL EXPOSED WALL BOARD EDGES. INSTALL CASING BEAD WHEREVER WALLBOARD, PLASTER, ETC. ABUTS A DISSIMILAR FINISH MATERIAL AND PROVIDE SEALANT AS REQUIRED.
17. CONTRACTOR SHALL PROVIDE AND INSTALL ALL STIFFENERS, BRACING, BLOCKING, HANGERS, BACK-UP PLATES AND SUPPORTING BRACKETS REQUIRED FOR THE INSTALLATION OF ALL CASEWORK, TOILET ACCESSORIES, FIXTURES AND PARTITIONS AND ALL WALL MOUNTED OR SUSPENDED MECHANICAL, ELECTRICAL, OR MISCELLANEOUS EQUIPMENT AND FURNISHINGS.
18. VERIFY SIZE OF ALL MECHANICAL OPENINGS THROUGH THE ROOF WITH MECHANICAL EQUIPMENT MANUFACTURER.
19. FOR MECHANICAL OPENING SIZES AND LOCATIONS IN WALLS, CHECK WITH MECHANICAL DRAWINGS. AN ACOUSTICAL SEAL SHALL BE PROVIDED BETWEEN ALL DUCTS, PIPING, AND PARTITIONS.
20. GYPSUM BOARD SHALL EXTEND 6" ABOVE CEILING AT ALL COLUMN ENCLOSURES, NON-RATED PARTITIONS, AND EXTERIOR PERIMETER WALLS UNLESS OTHERWISE NOTED OR DETAILED.
21. EXTERIOR JOINTS AROUND WINDOW, DOOR FRAMES, BETWEEN WALLS AND FOUNDATIONS, BETWEEN WALLS AND ROOF, BETWEEN WALL PANELS, AND AT PENETRATIONS OF UTILITIES THROUGH THE ENVELOPE SHALL BE SEALED, CAULKED WEATHER-STRIPPED TO LIMIT AIR LEAKAGE.
22. ALL DOOR SIZES SHOWN ON DOOR SCHEDULE ARE OPENING SIZES. ALLOWANCE FOR THRESHOLD, ETC. SHALL BE DEDUCTED. FRAMES SHALL BE REINFORCED WHERE REQUIRED FOR CLOSERS, STOPS AND HARDWARE.
23. ALL INTERIOR WALL AND CEILING FINISHES SHALL BE CLASS A AND FLOORS SHALL BE CLASS II MINIMUM PER NASA STD 8719.11.
24. SEE STRUCTURAL FOR EXTERIOR COLD-FORMED STEEL FRAMING NOTES, SCHEDULE, CONNECTIONS AND ANCHORING DETAILS

SEE SHEETS FOR SPECIFIC SYMBOLS

A-101 SHEET NUMBER
 SHEET NO. SEQUENCE
 SHEET TYPE
 DISCIPLINE

SHEET NUMBER

BLDG NORTH
 TRUE NORTH

NORTH ARROW

GRID BUBBLES **EXISTING GRID BUBBLES**

PLAN OR DETAIL CALLOUT
 PLAN OR DETAIL TITLE
View Name
 REF: R101
 SHEET NUMBER
 REFERENCE LOCATION
 SCALE: 1/8" = 1'-0"

PLAN OR DETAIL TITLE

SCALE: 1/16" = 1'-0" 0' 8' 16' 32' 64'

GRAPHIC SCALE

EXTERIOR ELEVATION CALLOUT
 SHEET ON WHICH ELEVATION IS DRAWN
 A301

INTERIOR ELEVATION CALLOUT
 SHEET ON WHICH ELEVATION IS DRAWN
 A A601 B A601 C D

ELEVATION REFERENCE **INTERIOR ELEVATION REFERENCE**

BUILDING SECTION NUMBER
 SHEET ON WHICH SECTION IS DRAWN
 1 A101 SIM

BUILDING SECTION NUMBER
 SHEET ON WHICH SECTION IS DRAWN
 1 A101 SIM

BUILDING SECTION REFERENCE **WALL SECTION REFERENCE**

DETAIL SECTION NUMBER
 SHEET ON WHICH SECTION IS DRAWN
 1 A101 SIM

DETAIL SECTION NUMBER
 SHEET ON WHICH SECTION IS DRAWN
 1 A101 SIM

DETAIL SECTION REFERENCE **DETAIL CALLOUT REFERENCE**

Room Name Room Name Room Name Room Name
 0-0000 0-0000 0-0000 0-0000
 NET SF NET SF
 OCC = # OCC = #

ROOM NAME W/ ROOM NUMBER W/AREA W/ OCCUPANT LOAD

(D101A) <A22> <S22>

DOOR TAG CURTAIN WALL TAG SHADE LOUVER TAG

XX (MFT-1) HEIGHT A.F.F. CEILING TYPE

WALL TAG MATERIAL TAG CEILING TAG

22.22 EL: +10'-0" LEVEL NAME EL 0'-0"

KEYNOTE TAG SPOT ELEVATION LEVEL HEADS

1 / A101

MATCHLINE REFERENCE CENTERLINE TAG

REVISION CALLOUT AND CLOUD FLOW ARROW REFERENCE

DIVISION 03 - CONCRETE	DIVISION 10 - SPECIALTIES
3.1 CAST IN PLACE CONCRETE	10.1 TOILET PARTITION
3.2 6" CONC HOUSEKEEPING PAD	10.2 FIXED SUNSCREEN (BIPV @ BID ALTERNATE)
3.3 VAPOR BARRIER	10.3 METAL LOCKER
3.4 GRANULAR FILL	10.4 FIRE EXTINGUISHER CABINET
3.5 CANE DETECTION AREA	10.5 DOOR STOP
	10.6 ALUM LIGHT SHELF (BID ALTERNATE)
	10.7 VINE CABLE SYSTEM
	10.8 EXTRUDED ALUM LOUVER AIRFOIL
	10.9 NOT USED
	10.10 ACCESS FLOORING- 10" HIGH
DIVISION 05 - METALS	DIVISION 11 - EQUIPMENT
5.1 STEEL BEAM	11.1 MOTORIZED PROJECTION SCREEN
5.2 STEEL COLUMN	11.2 PROJECTOR
5.3 METAL DECK	
5.4 STEEL ANGLE	DIVISION 12 - FURNISHINGS
5.5 STEEL PLATE	12.1 MOTORIZED WINDOW SHADE
5.6 TUBULAR STEEL	12.2 SYSTEM FURNITURE, NIC
5.7 STEEL BENT PLATE	12.3 ENTRANCE FLOOR MAT & FRAME
5.8 STAINLESS STEEL FRAME	
5.9 OPEN WEB STEEL JOIST	DIVISION 14 - EQUIPMENT
5.10 NOT USED	14.1 HYDRAULIC HOLELESS ELEVATOR, 3500 LB
5.11 EXT. COLD FORMED METAL FRAMING, SEE STRUCT.	
5.12 NOT USED	DIVISION 22 - PLUMBING
5.13 GUARDRAIL	22.1 ROOF DRAIN
5.14 HANDRAIL	22.2 OVERFLOW SCUPPER
5.15 METAL FRAMED STAIR	22.3 VENT THROUGH ROOF
5.16 TIEL CHAIN	22.4 ELECTRIC WATER COOLER
5.17 VISUALLY CONTRASTING STAINLESS STEEL STRIP, SEE SHEET 1/A002 FOR ACCESSIBILITY REQUIREMENTS	22.5 KITCHEN SINK
	22.6 SERVICE SINK
DIVISION 06 - WOOD, PLASTIC & COMPOSITES	22.7 FLOOR DRAIN
6.1 WOOD BLOCK/NAILER, PRESSURE TREATED	22.8 FILTERED WATER SYSTEM FAUCET
6.2 3/4" PLYWOOD, FIRE RETARDANT TREATED	22.9 DUAL FLUSH TOILET @ WOMEN'S
6.3 5/8" GLASS MAT FACED GYP SHEATHING	22.10 HIGH EFFICIENCY TOILET @ MEN'S
6.4 PLASTIC LAMINATE	22.11 LOW CONSUMPTION URINAL
6.5 SOLID-SURFACING MATERIAL COUNTERTOP	22.12 COUNTERTOP SINK
6.6 RECYCLED WOOD TREAD	22.13 ELECTRONIC LAVATORY FAUCET, TYP.
	22.14 HAND SHOWER SET WITH SLIDE BAR
DIVISION 07 - THERMAL & MOISTURE PROTECTION	22.15 URINAL ELECTRONIC FLUSH VALVE
7.1 STAINLESS METAL FLASHING/COUNTERFLASHING	DIVISION 23 - HVAC
7.2 THERMOPLASTIC MEMBRANE ROOFING	23.1 BOILER FLUE
7.3 MEMBRANE EDGE FASTENER @ 12" O/C	23.2 DUCT
7.4 SAND COATED ROOF WALKWAY	23.3 PERIMETER HYDRONIC HEATER
7.5 RIGID ROOF INSULATION OF AGED R=30 (UON)	23.4 FIRE DAMPER
7.6 BATT INSULATION R=19	23.5 RADIANT CEILING PANEL
7.7 PVC MEMBRANE FLASHING	23.6 MECHANICAL SHAFT OPENING
7.8 EXTRUDED ALUM TRIM	23.7 RADIANT FLOOR SLAB SYSTEM
7.9 ALUM FLASHING	
7.10 FORMED SHEET SS COPING	
7.11 BELOW GRADE DAMP/WATERPROOFING	
7.12 SEALANT WITH BACKER ROD	
7.13 20 GA GALVANIZED SPLASH PAN	
7.14 DOWN SPOUT	
7.15 WATERPROOFING MEMBRANE	
7.16 INSULATED METAL PANEL CLADDING	
7.17 ROOF SEISMIC JOINT COVER	
7.18 EXTERIOR WALL SEISMIC JOINT COVER	
7.19 INTERIOR WALL SEISMIC JOINT COVER	
7.20 CEILING SEISMIC JOINT COVER	
7.21 FIRESTOPPING	
7.22 SAND COATED ROOF WALKWAY	
7.23 METAL SPANDREL PANEL (INSULATED)	
7.24 THERMOPLASTIC MEMBRANE PARAPET FLASHING	
7.25 THERMOPLASTIC MEMBRANE COVER STRIP, HOT-AIR WELDED	
7.26 EXTRUDED ALUM BAR W/ FASTENERS @ 12" O.C.MAX	
7.27 FLOOR SEISMIC JOINT COVER	
7.28 S.S. PERFORATED RIBBED METAL (20 GA)	
7.29 METAL PANEL SOFFIT	
DIVISION 08 - OPENINGS	
8.1 DOOR & FRAME	
8.2 MOTORIZED OPERABLE WINDOW	
8.3 MANUAL OPERABLE WINDOW	
8.4 AUTOMATIC DOOR BOTTOM	
8.5 THRESHOLD	
8.6 GLAZED ALUM CURTAIN WALL SYSTEM	
8.7 1" INSULATED GLAZING	
8.8 FRITTED GLAZING	
8.9 SPANDREL GLAZING	
8.10 VISION GLASS (SAFETY WHERE REQUIRED)	
8.11 RECYCLED GLAZING	
8.12 AUTOMATIC ENTRANCE DOOR	
8.13 SKYLIGHT	
8.14 WEATHERSTRIPPING	
8.15 MTL SECURITY GATE	
8.16 DOOR PULL	
DIVISION 09 - FINISHES	
9.1 1/2" GWB TYPE X	
9.2 5/8" GWB TYPE X	
9.3 1" GWB SHAFT LINER	
9.4 20 GA MTL STUD @ 16" O/C	
9.5 SLOTTED TOP TRACK	
9.6 METAL STUD TRACK	
9.7 COLD FORMED FURRING CHANNEL	
9.8 SHAFT WALL STUD MIN 20 GA @ 24" O/C	
9.9 FRAMING ANGLE, MIN 20 GA GALV	
9.10 FURRING CHANNEL MIN 20 GA, SIZE AS NOTED	
9.11 SHAFT J RUNNER	
9.12 CERAMIC TILE	
9.13 REINFORCED MORTAR SETTING BED	
9.14 SCHEDULED FLOORING	
9.15 SUSPENDED GYP BOARD CEILING SYSTEM	
9.16 SCHEDULED WALL BASE	
9.17 PAINT	
9.18 5/8" CEMENTITIOUS TILE BACKER BOARD	
9.19 5/8" GLASS MAT FACED TILE BACKER BOARD	
9.20 NOT USED	
9.21 SOUND ATTENUATION BLANKET	
9.22 ACOUSTICAL INSULATION 3" (UON)	
9.23 SUSPENDED ACOUSTICAL CEILING	

PROJECT STATUS			
PRELIMINARY - NOT FOR CONSTRUCTION			
ISSUE			
1	10/20/2008	30% PRICING	
2	11/07/2008	30% DESIGN REVISION	
3	12/12/2008	60% INTERNAL QA/QC & COST ESTIMATE	
4	12/19/2008	60% PRE-FINAL, NASA REVIEW	
5	01/19/2009	60% FINAL ISSUE TO NASA	
6	02/16/2009	90% QA/QC & COST ESTIMATE	
MARK	DATE	DESCRIPTION	
DRAWN	DATE		
G JOHNSON			
DESIGNED	DATE		
WM + P			
CHECKED	DATE		
R PRADHAN			
PROJ/MGR	DATE		
REQUESTOR	DATE		
RQA	DATE		
SAFETY	DATE		
SUPERVISOR	DATE		



Ames Research Center
M

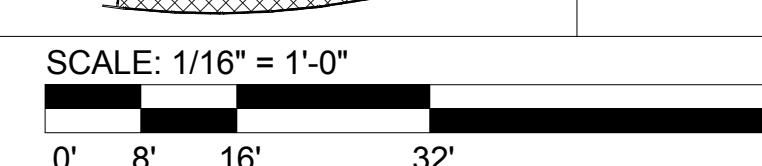
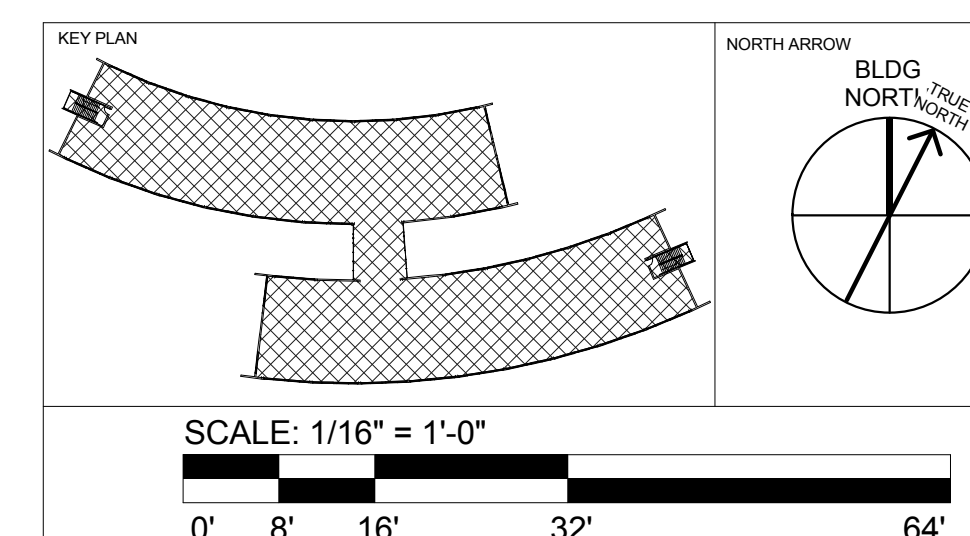
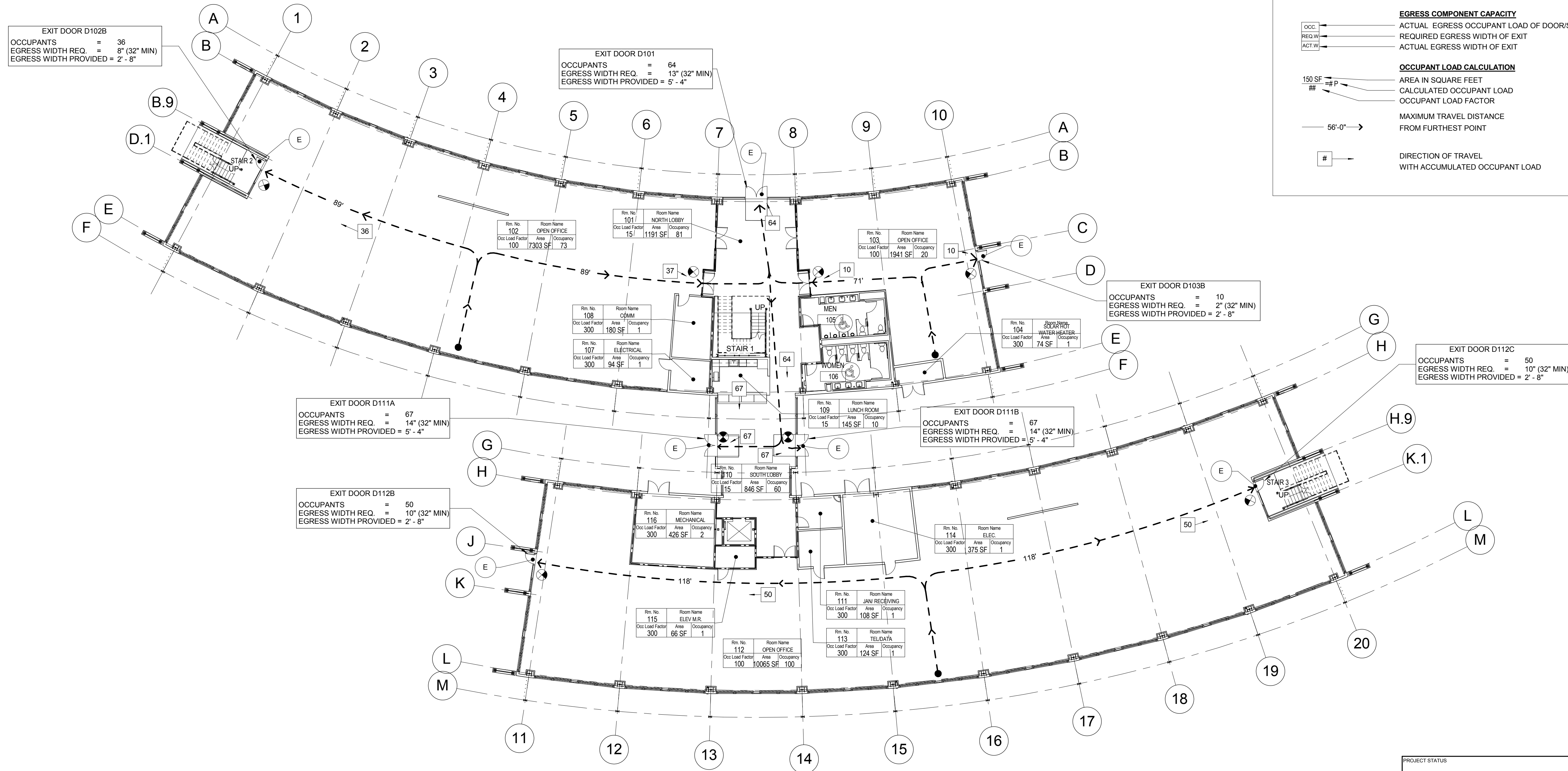
LIFE SAFETY SYMBOLS LEGEND

ROOM USE OCCUPANT LOAD	
	ROOM NUMBER
	ROOM NAME
	ROOM OCCUPANT LOAD
	ROOM AREA-NET OR GROSS AS REQ'D PER CODE
	OCCUPANT LOAD FACTOR BASED ON USE GROUP
	1 - HOUR FIRE RATED WALL
	FIRE EXTINGUISHER AND CABINET
	FIRE EXTINGUISHER AND WALL MOUNTING BRACKET
	EXIT SIGN (SINGLE SIDED, DOUBLE SIDED, W/ DIRECTIONAL ARROW, WALL MOUNTED)
EGRESS COMPONENT CAPACITY	
	ACTUAL EGRESS OCCUPANT LOAD OF DOOR/STAIR WIDTH
	REQUIRED EGRESS WIDTH OF EXIT
	ACTUAL EGRESS WIDTH OF EXIT
OCCUPANT LOAD CALCULATION	
	AREA IN SQUARE FEET
	CALCULATED OCCUPANT LOAD
	OCCUPANT LOAD FACTOR
	MAXIMUM TRAVEL DISTANCE FROM FURTHEST POINT
	DIRECTION OF TRAVEL WITH ACCUMULATED OCCUPANT LOAD

EXITING PLAN LEGEND

	REMOTE LOCATION/START OF EXIT ACCESS
	PATH OF TRAVEL
	COMMON PATH OF TRAVEL
	EXIT

NOTE:
1. STAIR 1 IS FOR CONVENIENCE ACCESS ONLY. IT IS NOT A REQUIRED COMPONENT OF THE MEANS OF EGRESS SYSTEM.
2. SEE SIGNAGE PLANS FOR TACTILE SIGNAGE
3. SEE SHEET G001 FOR LIFE SAFETY DESIGN CRITERIA



PROJECT STATUS		
PRELIMINARY - NOT FOR CONSTRUCTION		
ISSUE	DATE	DESCRIPTION
1	10/20/2008	30% PRICING
2	11/07/2008	30% DESIGN REVISION
3	12/12/2008	60% INTERNAL QA/QC & COST ESTIMATE
4	12/19/2008	60% PRE-FINAL, NASA REVIEW
5	01/19/2009	60% FINAL ISSUE TO NASA
6	02/16/2009	90% QA/QC & COST ESTIMATE
MARK	DATE	DESCRIPTION
DRAWN	G JOHNSON	
DESIGNED	WMHP	
CHECKED	R PRADHAN	
PROJ/MGR		
REQUESTOR		
R&GA		
SAFETY		
SUPERVISOR		
SIZE	CAUSE CODE	REV
D	25307	A011
SCALE	INDEX	SHEET OF

Ames Research Center
Moffet Field, California

N232 COLLABORATIVE SUPPORT FACILITY

FIRE RATED WALLS & EGRESS PLAN - FIRST FLOOR

LIFE SAFETY SYMBOLS LEGEND

ROOM USE OCCUPANT LOAD

ROOM NUMBER
ROOM NAME
ROOM OCCUPANT LOAD
ROOM AREA-NET OR GROSS AS REQ'D PER CODE
OCCUPANT LOAD FACTOR BASED ON USE GROUP

1 - HOUR FIRE RATED WALL

FIRE EXTINGUISHER AND CABINET
FIRE EXTINGUISHER AND WALL MOUNTING BRACKET

EXIT SIGN (SINGLE SIDED, DOUBLE SIDED, W/ DIRECTIONAL ARROW, WALL MOUNTED)

EGRESS COMPONENT CAPACITY

ACTUAL EGRESS OCCUPANT LOAD OF DOOR/STAIR WIDTH
REQUIRED EGRESS WIDTH OF EXIT
ACTUAL EGRESS WIDTH OF EXIT

OCCUPANT LOAD CALCULATION

AREA IN SQUARE FEET
CALCULATED OCCUPANT LOAD
OCCUPANT LOAD FACTOR
MAXIMUM TRAVEL DISTANCE FROM FURTHEST POINT

DIRECTION OF TRAVEL WITH ACCUMULATED OCCUPANT LOAD

EXITING PLAN LEGEND

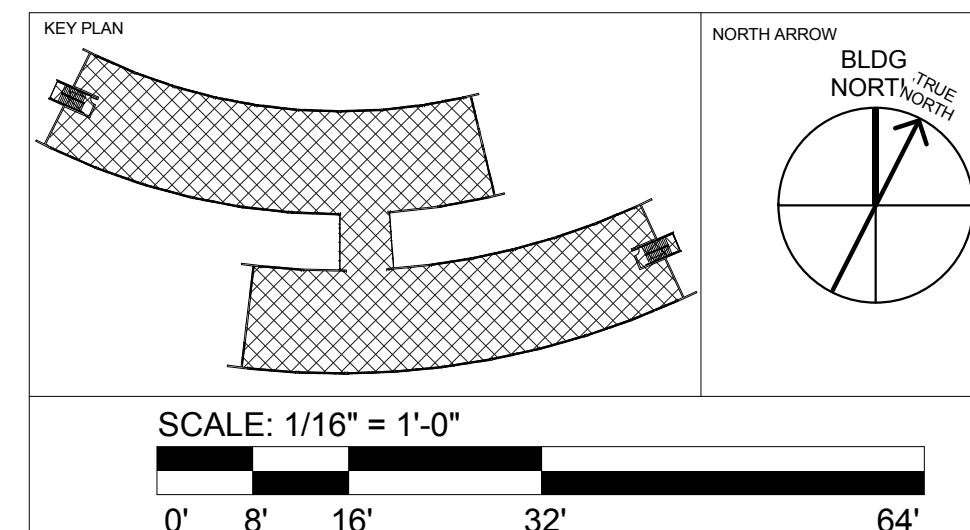
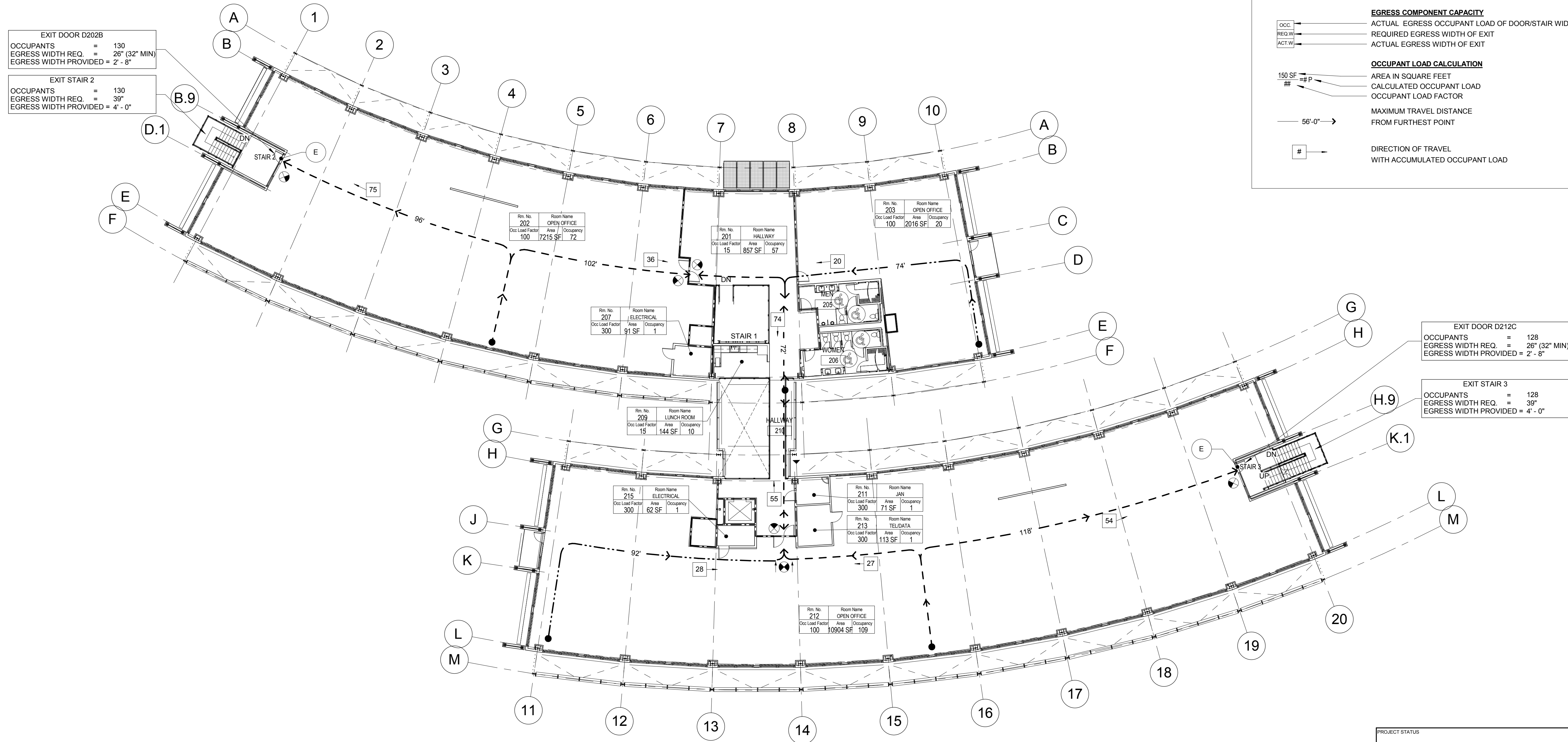
REMOTE LOCATION/START OF EXIT ACCESS

PATH OF TRAVEL
1016.1
MAXIMUM TRAVEL DISTANCE WITH AUTOMATIC SPRINKLER SYSTEM THROUGHOUT, SHALL BE 300'-0".

COMMON PATH OF TRAVEL

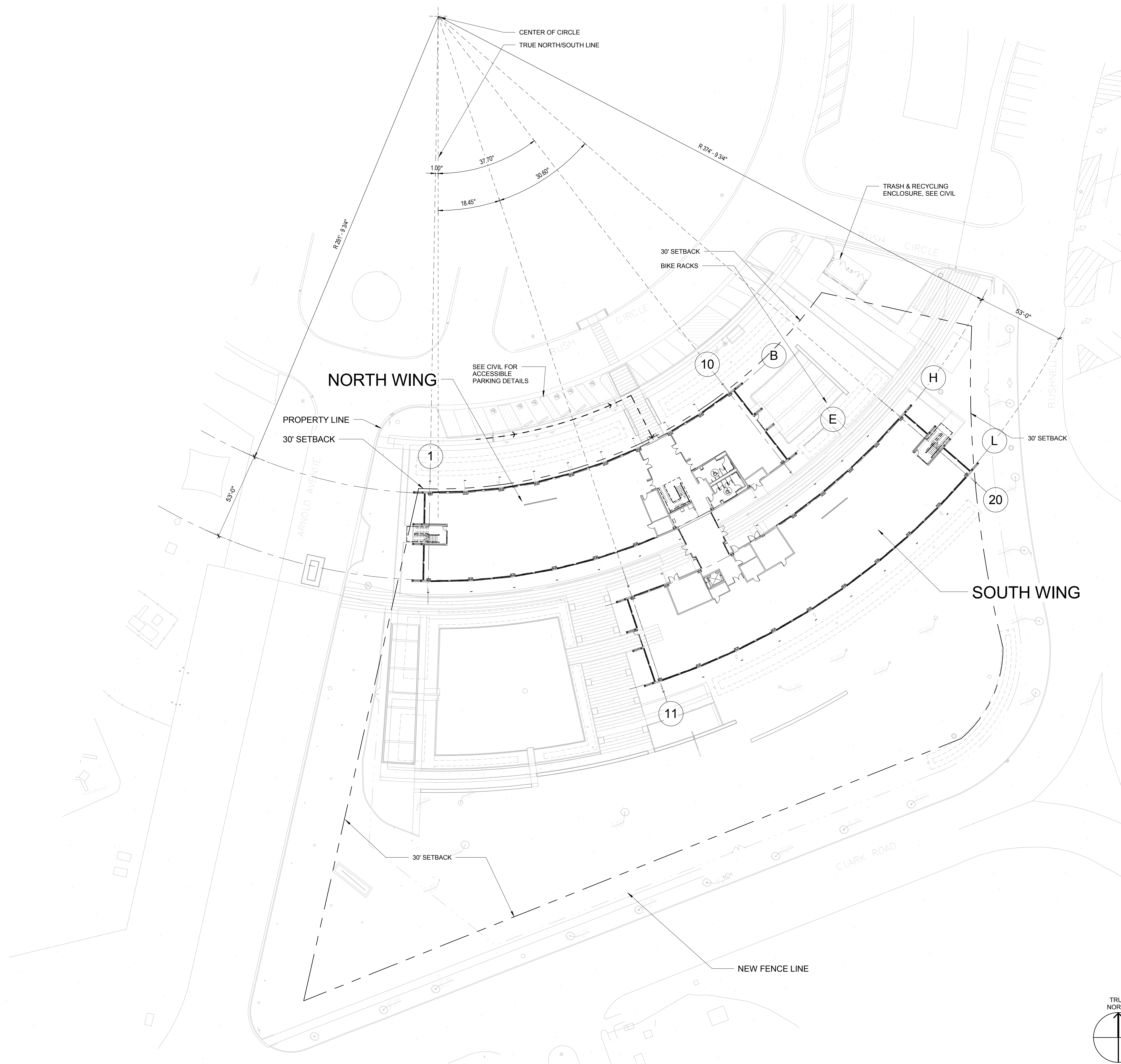
EXIT

NOTE:
1. STAIR 1 IS FOR CONVENIENCE ACCESS ONLY. IT IS NOT A REQUIRED COMPONENT OF THE MEANS OF EGRESS SYSTEM.
2. SEE SIGNAGE PLANS FOR TACTILE SIGNAGE
3. SEE SHEET G001 FOR LIFE SAFETY DESIGN CRITERIA



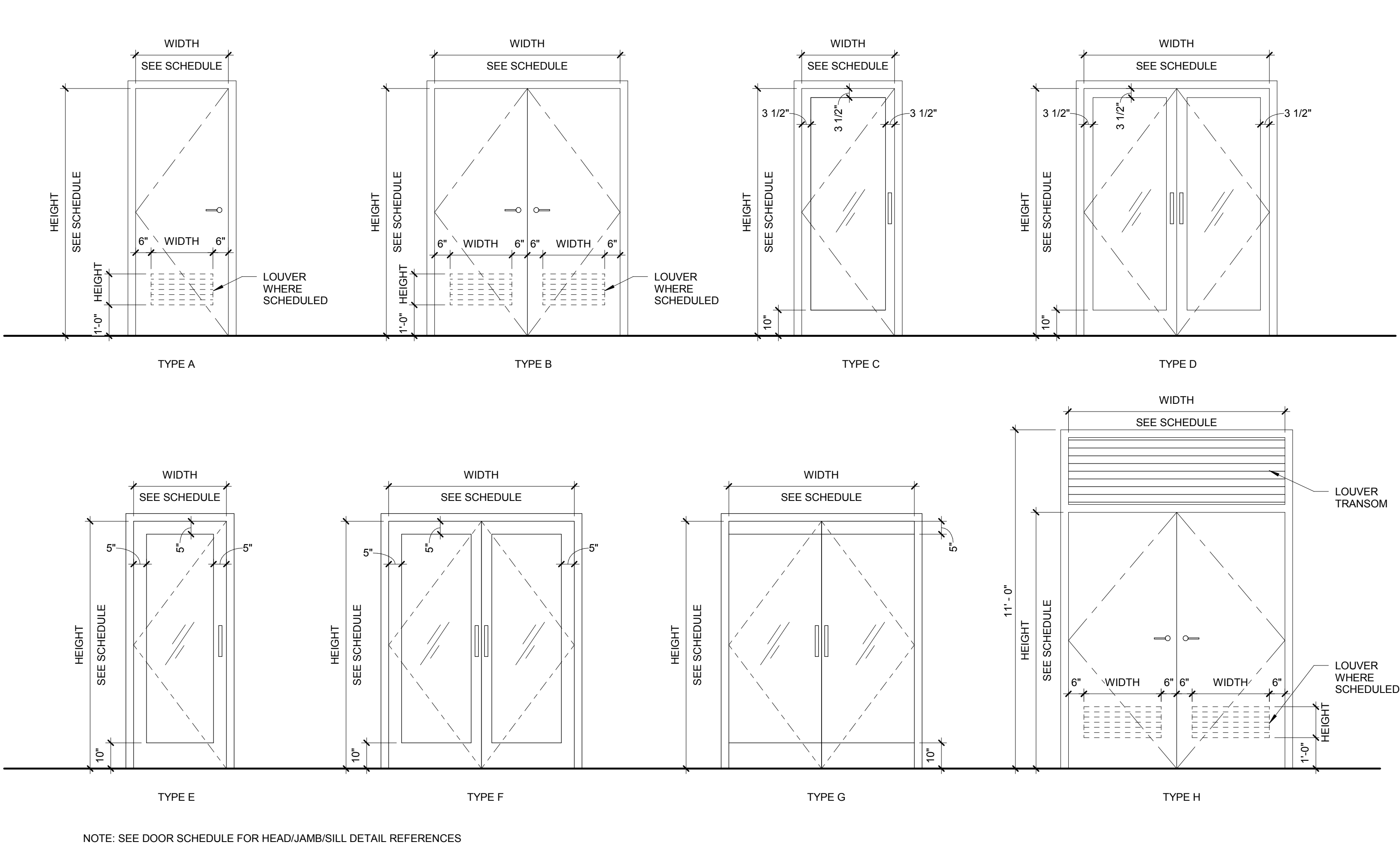
PROJECT STATUS		
PRELIMINARY - NOT FOR CONSTRUCTION		
ISSUE	DATE	DESCRIPTION
1	10/20/2008	30% PRICING
2	11/07/2008	30% DESIGN REVISION
3	12/12/2008	60% INTERNAL QA/QC & COST ESTIMATE
4	12/19/2008	60% PRE-FINAL, NASA REVIEW
5	01/19/2009	60% FINAL ISSUE TO NASA
6	02/16/2009	90% QAQC & COST ESTIMATE
MARK	DATE	DESCRIPTION
DRAWN	G JOHNSON	
DESIGNED	WM+P	
CHECKED	R PRADHAN	
PROJ/MGR		
REQUESTOR		
R&GA		
SAFETY		
SUPERVISOR		
SIZE	D	
CASE CODE	25307	
SCALE		
INDEX		
SHEET		
OF		
Ames Research Center Moffet Field, California		
N232 COLLABORATIVE SUPPORT FACILITY		
FIRE RATED WALLS & EGRESS PLAN - SECOND FLOOR		
A232-0800-	A012	

2/16/2009 6:12:52 PM



PROJECT STATUS		
PRELIMINARY - NOT FOR CONSTRUCTION		
ISSUE	DATE	DESCRIPTION
1	10/20/2008	30% PRICING
2	11/07/2008	30% DESIGN REVISION
3	12/12/2008	60% INTERNAL QA/QC & COST ESTIMATE
4	12/19/2008	60% PRE-FINAL, NASA REVIEW
5	01/19/2009	60% FINAL ISSUE TO NASA
6	02/16/2009	90% QA/QC & COST ESTIMATE
MARK	DATE	DESCRIPTION
DRAWN	G JOHNSON	DATE
DESIGNED	WMHP	DATE
CHECKED	R PRADHAN	DATE
PROJ/MGR		DATE
REQUESTOR		DATE
R&GA		DATE
SAFETY		DATE
SUPERVISOR		DATE
SIZE	CASE CODE	INDEX
D	25307	A232-0800-
SCALE		
ARCHITECTURAL SITE PLAN & COLUMN GRID PLAN		REV
N332 COLLABORATIVE SUPPORT FACILITY		
Ames Research Center Moffet Field, California		
A100		OF

DOOR AND FRAME SCHEDULE																
DOOR										DOOR FRAME						
NUMBER	TYPE MARK	WIDTH	HEIGHT	THICKNESS	MATERIAL	FINISH	PROFILE	MATERIAL	FINISH	HEAD DETAIL	JAMB DETAIL	SILL DETAIL	CLOSER	FIRE RATING (MINUTES)	HARDWARE GROUP	COMMENTS
First Floor																
First Floor	D101	G	6'-0"	7'-9 1/2"	0'-1 1/2"	GL	FF	3	AL	FF	7/A741	3/A741	1E/A102	Yes		1, 2, 5
First Floor	D102A	B	6'-0"	8'-0"	0'-1 3/4"	WD	ST	2	HM	PT	2/A741	2/A741	1B/A102	Yes	45	
First Floor	D102B	E	3'-0"	8'-3 1/2"	0'-1 3/4"	AL/GL	FF	3	AL	FF	3/A741	3/A741	1E/A102	Yes		3, 5
First Floor	D102C	B	6'-0"	8'-0"	0'-1 3/4"	WD	ST	2	HM	PT	2/A741	2/A741	1B/A102	Yes	45	
First Floor	D103A	B	6'-0"	8'-0"	0'-1 3/4"	WD	ST	2	HM	PT	2/A741	2/A741	1B/A102	Yes	45	
First Floor	D103B	E	3'-0"	8'-3 1/2"	0'-1 3/4"	AL/GL	FF	3	AL	FF	3/A741	3/A741	1E/A102	Yes		3, 5
First Floor	D103C	B	6'-0"	8'-0"	0'-1 3/4"	WD	ST	2	HM	PT	2/A741	2/A741	1B/A102	Yes	45	
First Floor	D104	B	6'-0"	8'-3 1/2"	0'-1 3/4"	HM	PT	1	HM	PT	4/A741	5,6/A741	1D/A102	No		
First Floor	D105	A	3'-0"	8'-0"	0'-1 3/4"	WD	ST	2	HM	PT	2/A741	2/A741	1A/A102	Yes	45	
First Floor	D106	A	3'-0"	8'-0"	0'-1 3/4"	WD	ST	2	HM	PT	2/A741	2/A741	1A/A102	Yes	45	
First Floor	D107	A	3'-0"	8'-0"	0'-1 3/4"	WD	ST	2	HM	PT	2/A741	2/A741	1B/A102	No		
First Floor	D108	A	3'-0"	8'-0"	0'-1 3/4"	WD	ST	2	HM	PT	2/A741	2/A741	1B/A102	No		
First Floor	D110A	F	6'-0"	8'-3 1/2"	0'-1 3/4"	AL/GL	FF	4	AL	FF	7/A741	3/A741	1E/A102	Yes		1, 5
First Floor	D110B	F	6'-0"	8'-3 1/2"	0'-1 3/4"	AL/GL	FF	4	AL	FF	7/A741	3/A741	1E/A102	Yes		1, 5
First Floor	D111A	A	3'-0"	8'-0"	0'-1 3/4"	WD	ST	2	HM	PT	2/A741	2/A741	1B/A102	No		
First Floor	D111B	B	3'-6"	8'-3 1/2"	0'-1 3/4"	HM	PT	1	HM	PT	4/A741	5,6/A741	1D/A102	No		1
First Floor	D112A	B	6'-0"	8'-0"	0'-1 3/4"	WD	ST	2	HM	PT	2/A741	2/A741	1B/A102	Yes	45	
First Floor	D112B	E	3'-0"	8'-3 1/2"	0'-1 3/4"	AL/GL	FF	3	AL	FF	3/A741	3/A741	1E/A102	Yes		3, 5
First Floor	D112C	E	3'-0"	8'-3 1/2"	0'-1 3/4"	AL/GL	FF	3	AL	FF	3/A741	3/A741	1E/A102	Yes		3, 5
First Floor	D113	A	3'-0"	8'-0"	0'-1 3/4"	WD	ST	2	HM	PT	2/A741	2/A741	1B/A102	No		
First Floor	D114A	A	3'-0"	8'-0"	0'-1 3/4"	WD	ST	2	HM	PT	2/A741	2/A741	1B/A102	Yes		3
First Floor	D114B	H	7'-0"	8'-3 1/2"	0'-1 3/4"	HM	PT	1	HM	PT	4/A741	5,6/A741	1D/A102	No		1, 7, 8
First Floor	D115	A	3'-0"	8'-0"	0'-1 3/4"	WD	ST	2	HM	PT	2/A741	2/A741	1B/A102	Yes	45	
First Floor	D116	B	6'-0"	8'-3 1/2"	0'-1 3/4"	HM	PT	1	HM	PT	4/A741	5,6/A741	1D/A102	No		1, 7
First Floor: 24																
Second Floor																
Second Floor	D202A	B	6'-0"	8'-0"	0'-1 3/4"	WD	ST	2	HM	PT	2/A741	2/A741	1B/A102	Yes	45	4
Second Floor	D202B	E	3'-0"	7'-3 1/2"	0'-1 3/4"	AL/GL	FF	3	AL	FF	3/A741	3/A741	1E/A102	Yes		3, 5
Second Floor	D203A	A	3'-0"	8'-0"	0'-1 3/4"	WD	ST	2	HM	PT	2/A741	2/A741	1B/A102	Yes	45	
Second Floor	D203B	E	3'-0"	7'-3 1/2"	0'-1 3/4"	AL/GL	FF	3	AL	FF	3/A741	3/A741	1E/A102	Yes		5
Second Floor	D205	A	3'-0"	8'-0"	0'-1 3/4"	WD	ST	2	HM	PT	2/A741	2/A741	1A/A102	Yes	45	
Second Floor	D205A	A	3'-0"	8'-0"	0'-1 3/4"	WD/PLM	ST	2	HM	PT	2/A741	2/A741	1A/A102			6
Second Floor	D206	A	3'-0"	8'-0"	0'-1 3/4"	WD	ST	2	HM	PT	2/A741	2/A741	1A/A102	Yes	45	
Second Floor	D206A	A	3'-0"	8'-0"	0'-1 3/4"	WD/PLM	ST	2	HM	PT	2/A741	2/A741	1A/A102			6
Second Floor	D207	A	3'-0"	8'-0"	0'-1 3/4"	WD	ST	2	HM	PT	2/A741	2/A741	1B/A102	No		
Second Floor	D211	A	3'-0"	8'-0"	0'-1 3/4"	WD	ST	2	HM	PT	2/A741	2/A741	1B/A102	No		
Second Floor	D212A	B	6'-0"	8'-0"	0'-1 3/4"	WD	ST	2	HM	PT	2/A741	2/A741	1B/A102	Yes	45	4
Second Floor	D212B	E	3'-0"	7'-3 1/2"	0'-1 3/4"	AL/GL	FF	3	AL	FF	3/A741	3/A741	1E/A102	Yes		5
Second Floor	D212C	E	3'-0"	7'-3 1/2"	0'-1 3/4"	AL/GL	FF	3	AL	FF	3/A741	3/A741	1E/A102	Yes		5
Second Floor	D213	A	3'-0"	8'-0"	0'-1 3/4"	WD	ST		HM	PT				No		
Second Floor	D215	A	3'-0"	8'-0"	0'-1 3/4"	WD	ST	2	HM	PT	2/A741	2/A741	1B/A102	No		
Second Floor: 15																
Grand total: 39																



NOTE: SEE DOOR SCHEDULE FOR HEAD/JAMB/SILL DETAIL REFERENCES

2 | LEGEND - DOOR TYPES

A102 REF: NOT TO SCALE

GENERAL NOTES - DOORS

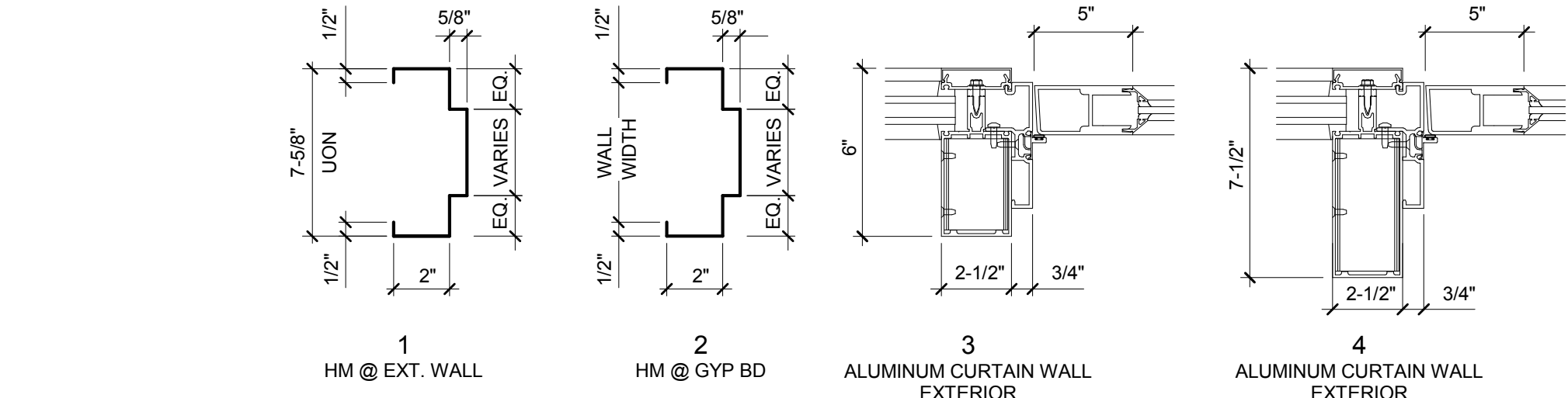
- FRAME:** FRAME EXTENSIONS ADJUSTING TO WALL DEPTH ARE TYPICAL - REFER TO DOOR DETAILS. CONTRACTOR TO COORDINATE DOOR BUCK WIDTH WITH SPECIFIED WALL TYPE.
- DIMENSIONS:** DIMENSIONS ARE NOMINAL - MANUFACTURER PROVIDING THE DOORS TO DETERMINE THE ROUGH OPENINGS EXCEPT THE OPENINGS IN CONCRETE WALLS THAT HAVE BEEN ALREADY SPECIFIED.
- HARDWARE:** FOR HARDWARE GROUP SPECIFICATIONS REFER TO THE PROJECT MANUAL UNDER HARDWARE SPECS. MOUNT DOOR HARDWARE @ 36" AFF.
- ELECTRICAL DEVICES** SUCH AS MAGNETIC LOCKS, CARD READERS AND ALARM SYSTEMS BEING PART OF THE DOOR FUNCTION ARE INCLUDED AS PART OF THE ELECTRICAL PLANS AND THE HARDWARE GROUPS.
- GLAZING:** GLAZING AS NOTED ON DOOR ELEVATIONS. SEE SPECIFICATIONS FOR SAFETY GLAZING LOCATION REQUIREMENTS. LOCATE PER CODE REQUIREMENTS.
- FINISH:** SEE FINISH SCHEDULE FOR DOOR, FRAME, AND TRIM FINISH.
- COORDINATE DOORS & GATES OUTSIDE BUILDING WITH SITE PLAN.
- EXTERIOR STEEL DOORS SHALL BE INSULATED

DOOR LEGEND

- AL ALUMINUM
- FF FACTORY FINISH
- GL GLASS
- HM HOLLOW METAL
- PT PAINT
- ST STAIN
- WD WOOD

DOOR SCHEDULE COMMENTS LEGEND

- ACCESS CONTROL DEVICE
- AUTOMATIC DOOR OPERATOR IN CONCEALED HEADER
- EMERGENCY EXIT ONLY- NO HARDWARE ON EXTERIOR
- DUAL EGRESS
- BALANCED MAGNETIC SWITCH
- SHOWER SIDE OF DOOR TO HAVE PLM FINISH
- FULLY LOUVERED DOOR
- LOUVER TRANSOM ABOVE DOOR



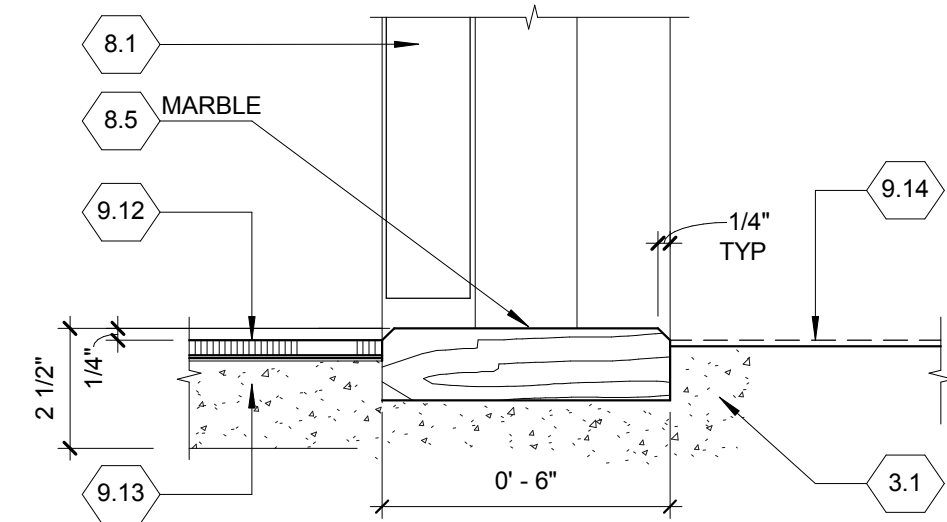
3 | LEGEND - DOOR FRAME PROFILES

A102 REF: NOT TO SCALE

1 | DOOR THRESHOLD DETAILS

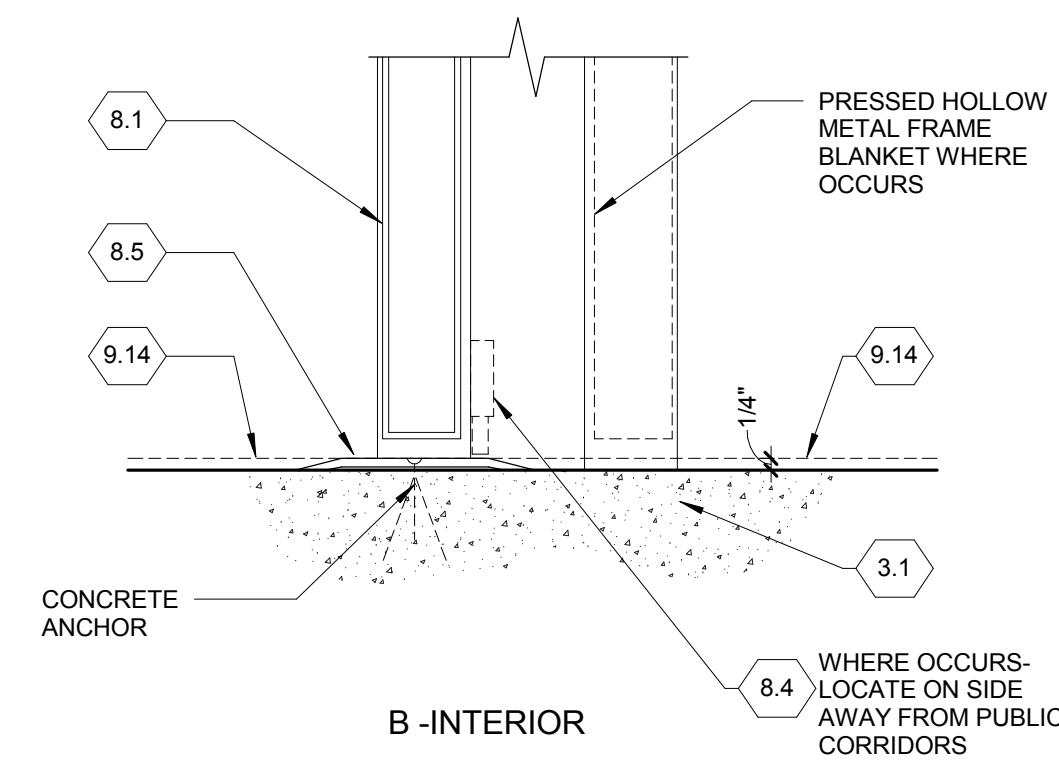
A102 REF: NOT TO SCALE

RESTROOM



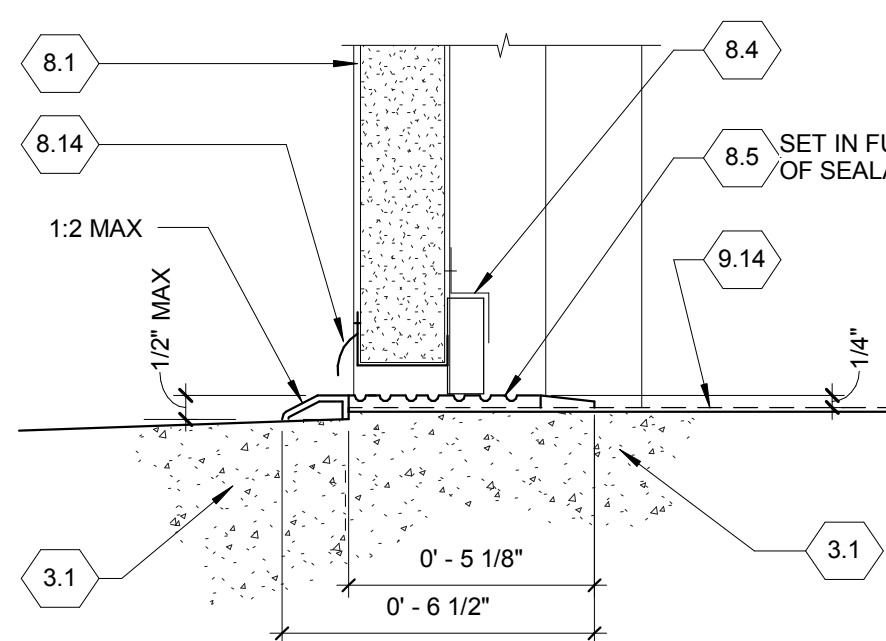
A- RESTROOM

HALLWAY



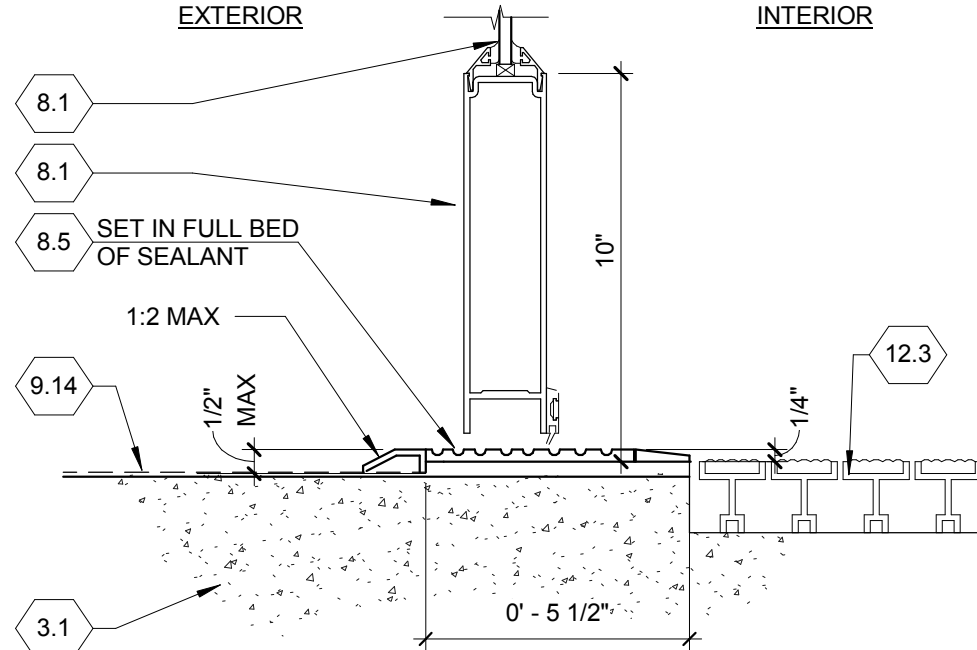
B- INTERIOR

EXTERIOR



D- EXTERIOR

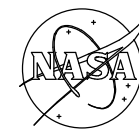
INTERIOR



E- EXTERIOR

NOTE: SEE SHEET A001 FOR MATERIAL KEYNOTES

PROJECT STATUS		
PRELIMINARY - NOT FOR CONSTRUCTION		
ISSUE	DATE	DESCRIPTION
1	10/20/2008	30% PRICING
2	11/07/2008	30% DESIGN REVISION
3	12/12/2008	60% INTERNAL QA/QC & COST ESTIMATE
4	12/19/2008	60% PRE-FINAL, NASA REVIEW
5	01/19/2009	60% FINAL ISSUE TO NASA
6	02/16/2009	90% QAQC & COST ESTIMATE
MARK	DATE	DESCRIPTION
DRAWN	G JOHNSON	
DESIGNED	WM + P	
CHECKED	R PRADHAN	
PROJ/MGR		
REQUESTOR		
R&GA		
SAFETY		
SUPERVISOR		
SIZE	CASE CODE	
D	25307	A232-0800-
SCALE	INDEX	SHEET
		OF



Ames Research Center
Moffet Field, California

N232 COLLABORATIVE SUPPORT FACILITY

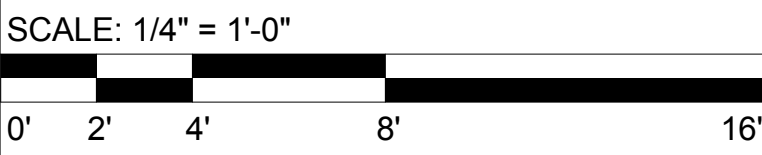
DOOR SCHEDULE & DETAILS



GENERAL NOTES - WINDOWS

- GL-1 VISION
GL-2 SPANDREL GLASS
- 8.2 MOTORIZED OPERABLE WINDOW, GL-1
PROVIDE SINGLE CHAIN FOR WINDOWS UP TO 4'-0"
WIDE & DUAL CHAINS FOR WINDOWS WIDER THAN 4'-0"
- 8.3 MANUAL OPERABLE WINDOW, GL-1
- 7.23 METAL SPANDREL PANEL (INSULATED)

- NOTE:
1. PROVIDE SAFETY GLAZING AT HAZARDOUS LOCATIONS PER
CBC SECTION 2406.3
 2. VERIFY ALL CURTAIN WALL DIMENSIONS IN FIELD.
 3. FOR ALUMINUM AND GLASS TYPES, SEE FINISH SCHEDULE.



PROJECT STATUS		
PRELIMINARY - NOT FOR CONSTRUCTION		
ISSUE	DATE	DESCRIPTION
1	10/20/2008	30% PRICING
2	11/07/2008	30% DESIGN REVISION
3	12/12/2008	60% INTERNAL QA/QC & COST ESTIMATE
4	12/19/2008	60% PRE-FINAL, NASA REVIEW
5	01/19/2009	60% FINAL ISSUE TO NASA
6	02/16/2009	90% QA/QC & COST ESTIMATE
MARK	DATE	DESCRIPTION
DRAWN	G JOHNSON	DATE
DESIGNED	WM + P	DATE
CHECKED	R PRADHAN	DATE
PROJUMGR		DATE
REQUESTOR		DATE
R&GA		DATE
SAFETY		DATE
SUPERVISOR		DATE
SIZE	CASE CODE	REV
D	25307	A103
SCALE	INDEX	SHEET OF

 **Ames Research Center**
Moffet Field, California

N232 COLLABORATIVE SUPPORT FACILITY


CURTAIN WALL TYPES

12.1 MOTORIZED WINDOW SHADE

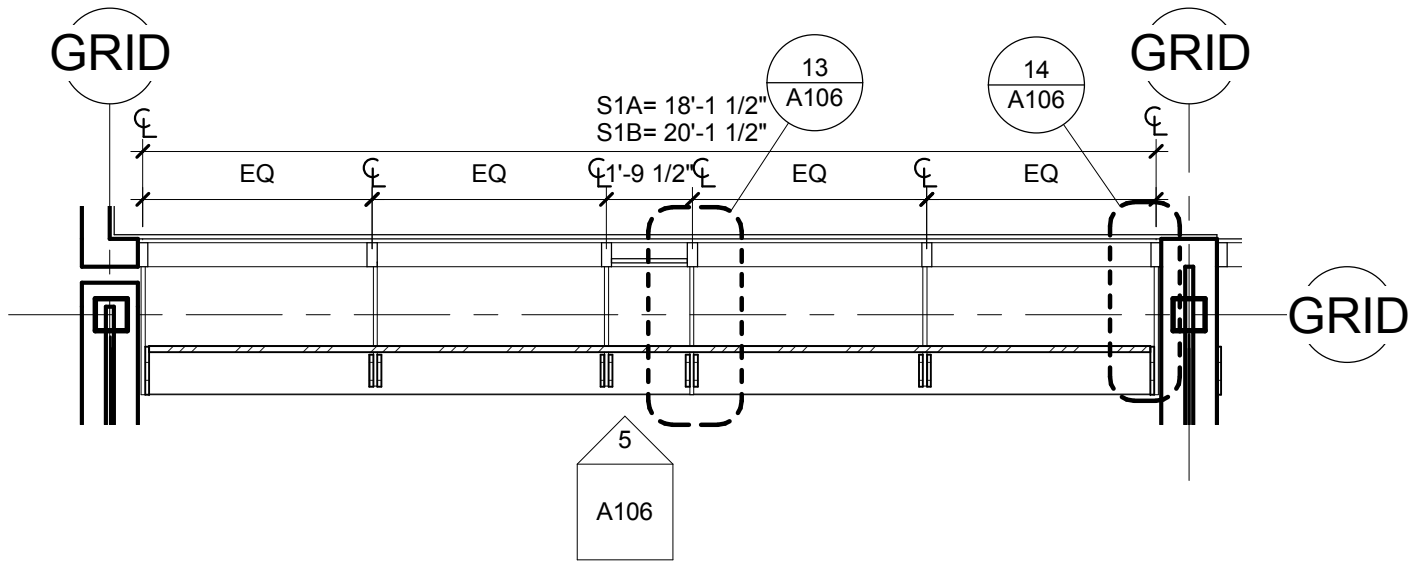
1. WINDOW SHADES ARE REFERENCED PER CURTAIN WALL TYPE. SEE CURTAIN WALL SCHEDULE FOR DIMENSIONS.

2. SEE FINISH SCHEDULE FOR MATERIALS AND COLORS.

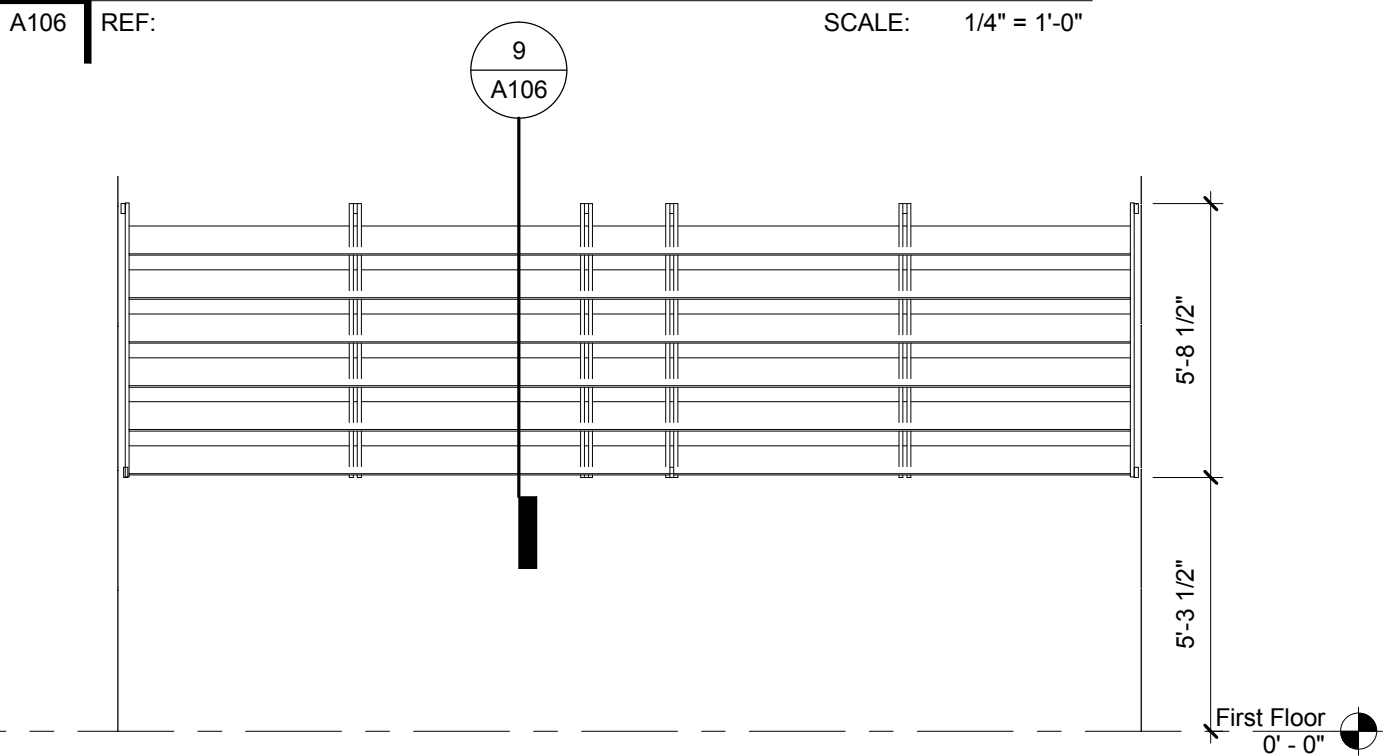
 WSD-1
EXTENT OF WINDOW SHADES

PROJECT STATUS									
PRELIMINARY - NOT FOR CONSTRUCTION									
ISSUE									
1	10/20/2008	30% PRICING							
2	11/07/2008	30% DESIGN REVISION							
3	12/12/2008	60% INTERNAL QA/QC & COST ESTIMATE							
4	12/19/2008	60% PRE-FINAL, NASA REVIEW							
5	01/19/2009	60% FINAL ISSUE TO NASA							
6	02/16/2009	90% QAQC & COST ESTIMATE							
MARK	DATE	DESCRIPTION							
DRAWN	G JOHNSON	 <p>Ames Research Center Moffett Field, California</p> <p>N232 COLLABORATIVE SUPPORT FACILITY</p> <p>WINDOW SHADE TYPES</p>							
DESIGNED	WM+P								
CHECKED	R PRADHAN								
PROJUMGR									
REQUESTOR									
R&GA									
SAFETY									
SUPERVISOR	DATE	SIZE D	CAGE CODE 25307	A232-0800-		A104		REV	
		SCALE		INDEX		SHEET		OF	

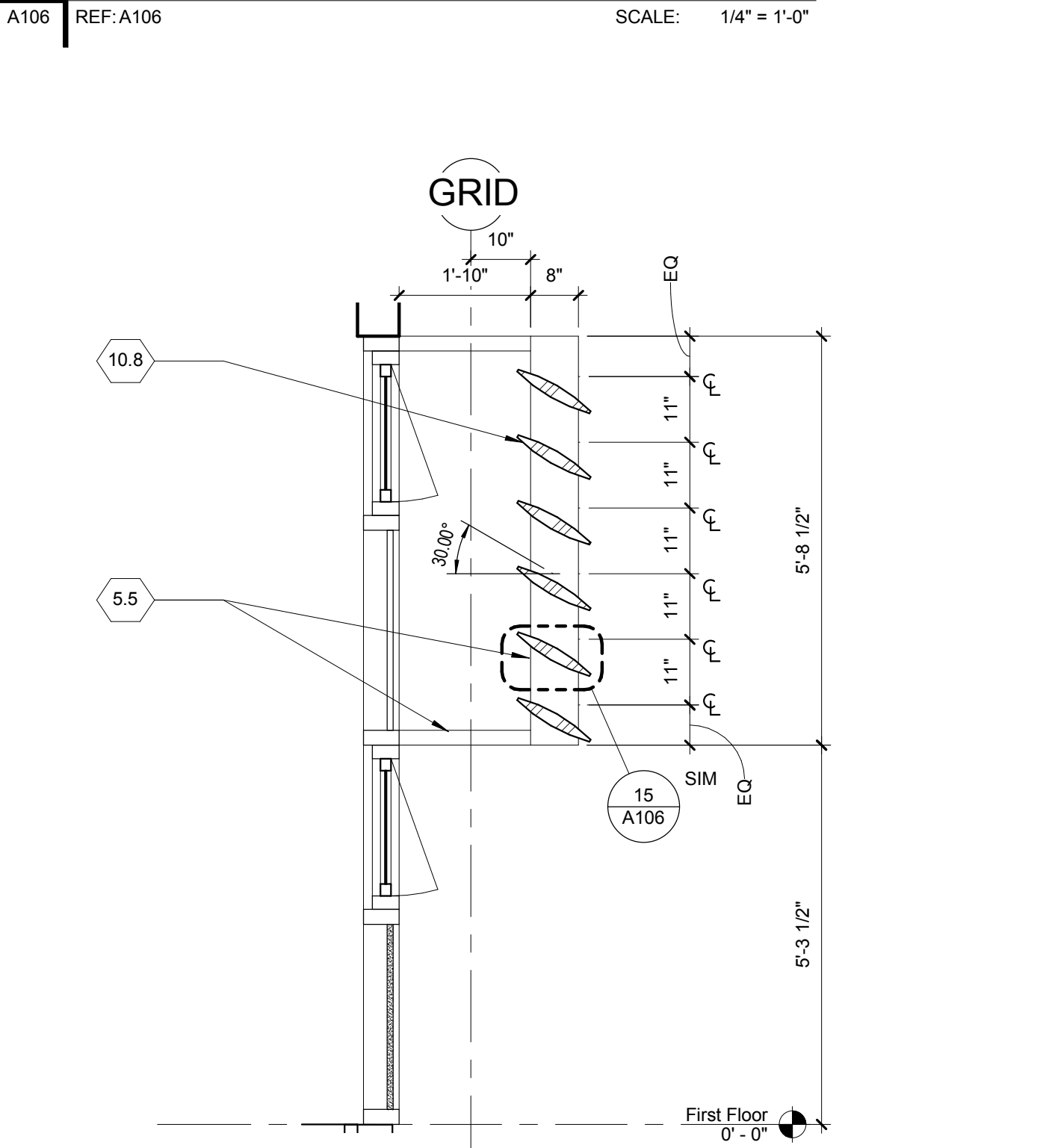
2/16/2009 6:13:06 PM



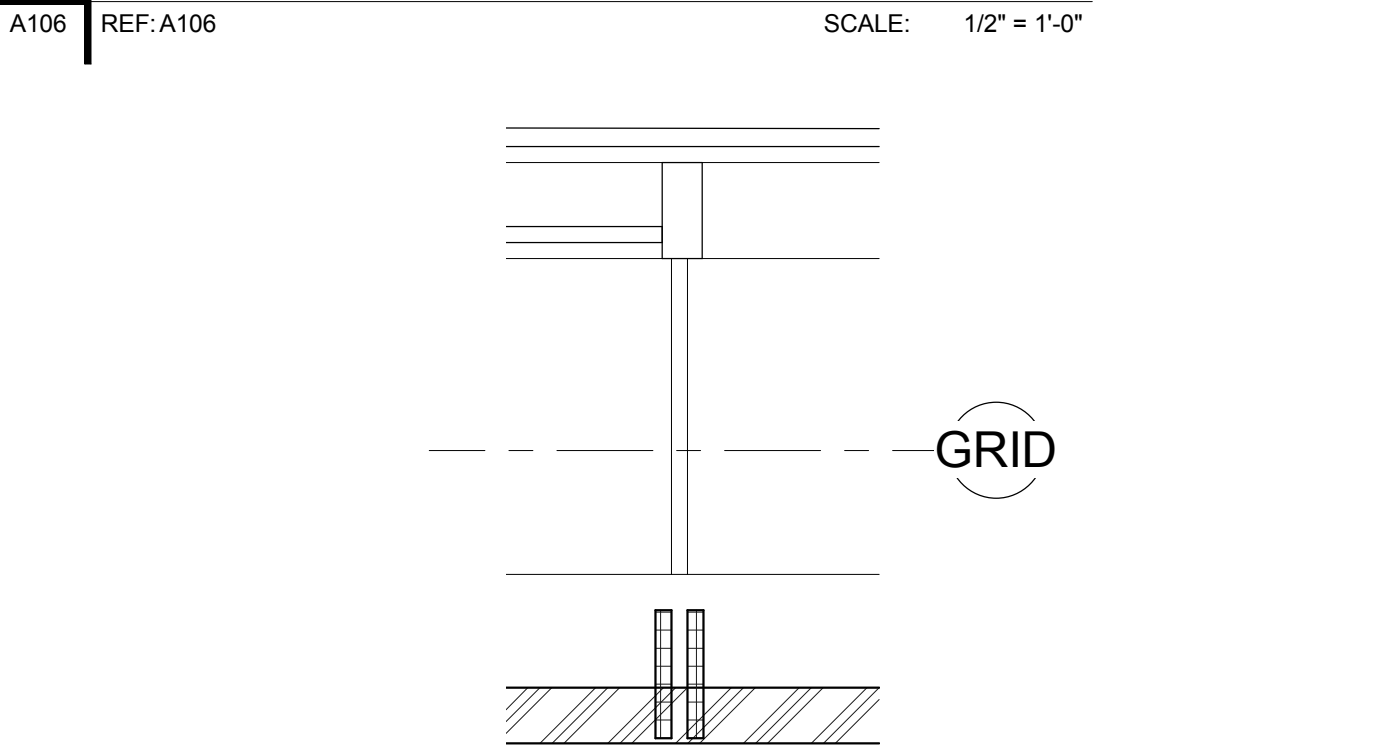
1 SHADE TYPE S1- PLAN



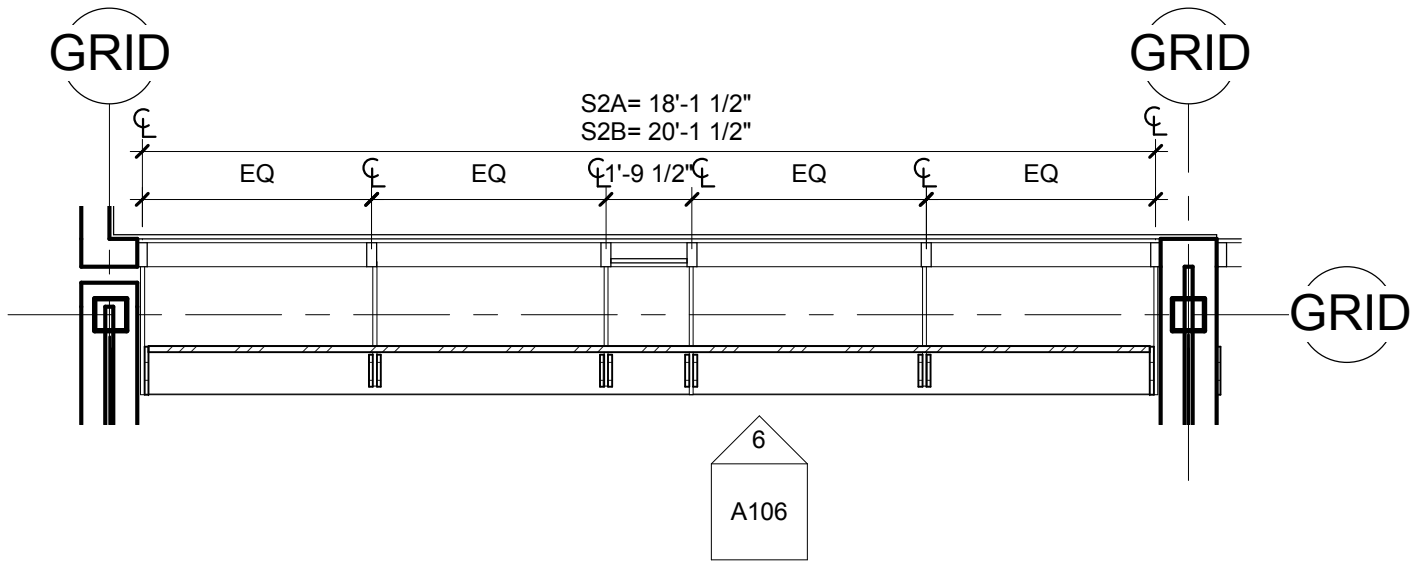
5 SHADE TYPE S1- ELEVATION



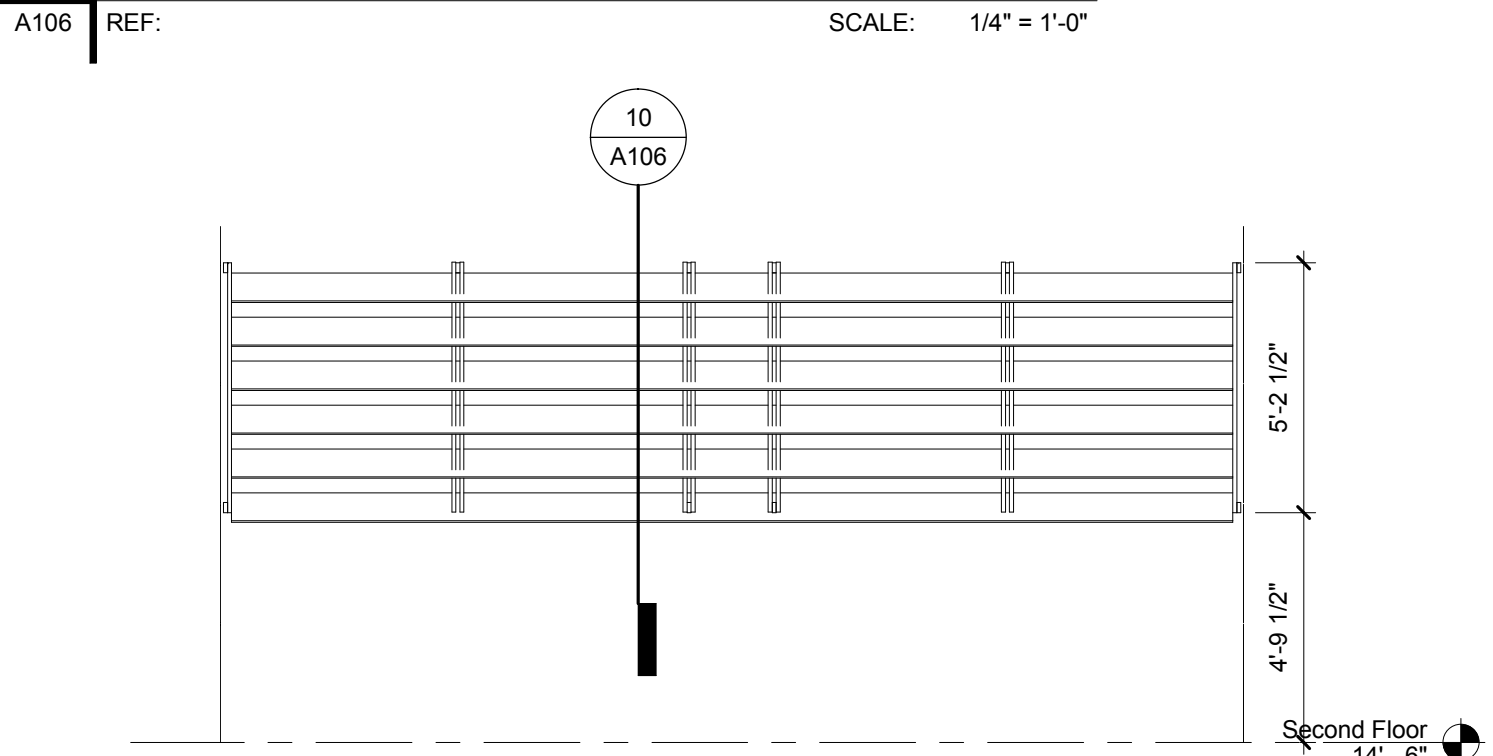
9 SHADE TYPE S1- SECTION



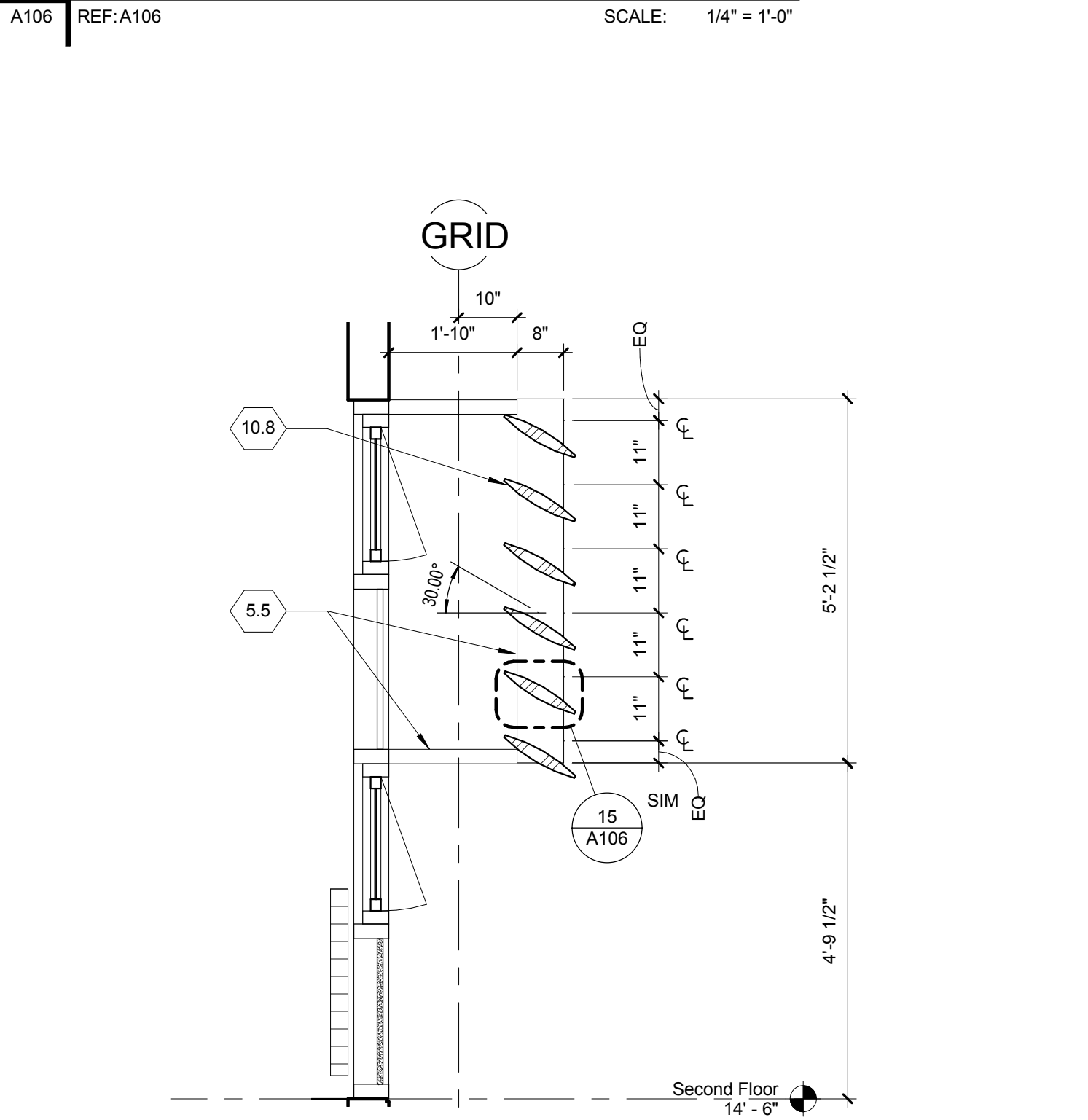
13 SHADE CONNECTION DETAIL @ INTERMEDIATE MULLION



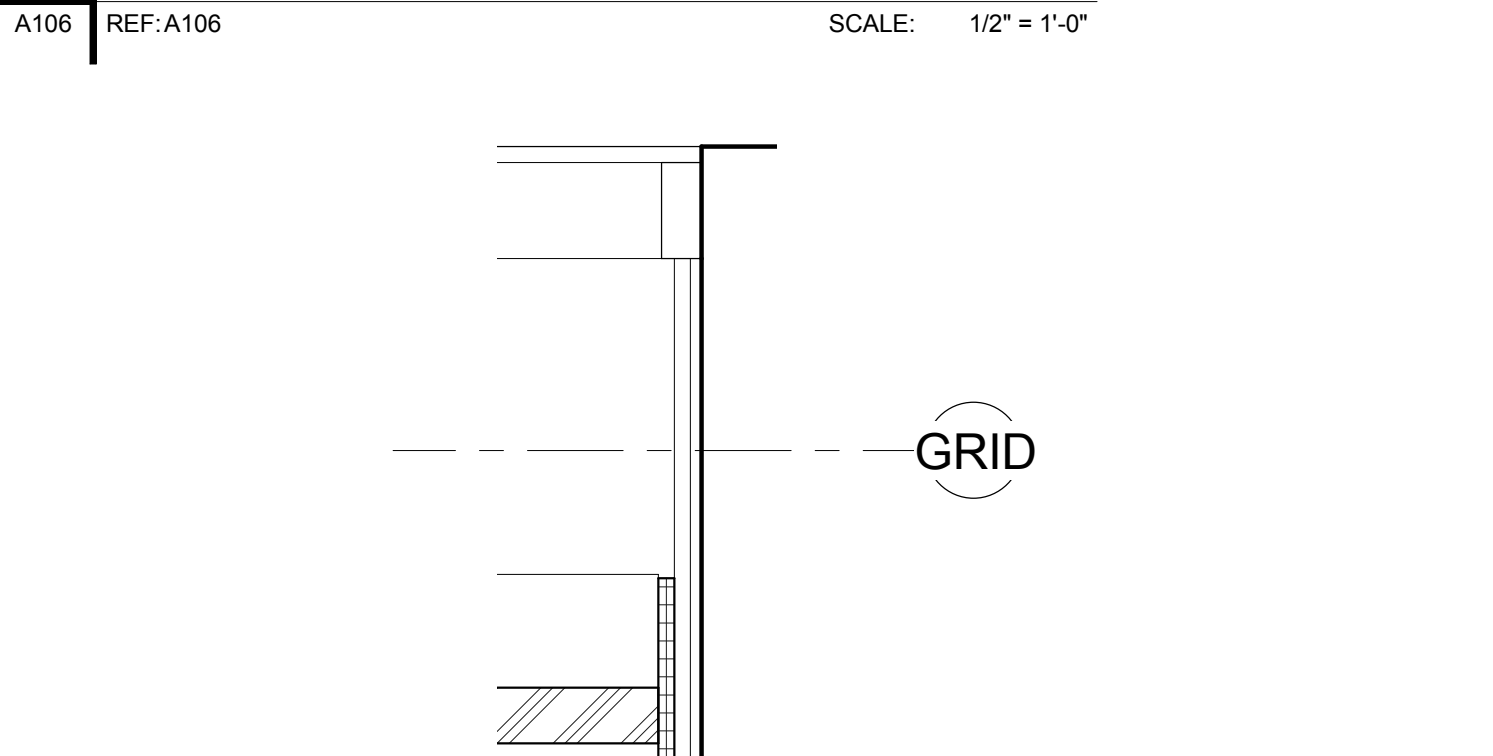
2 SHADE TYPE S2- PLAN



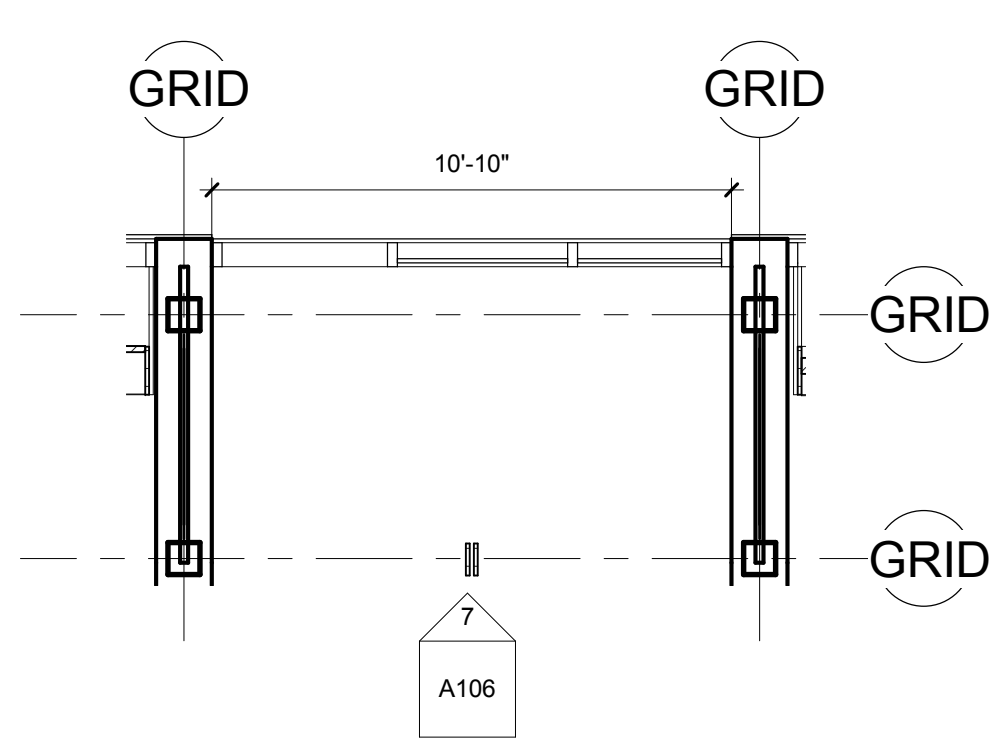
6 SHADE TYPE S2- ELEVATION



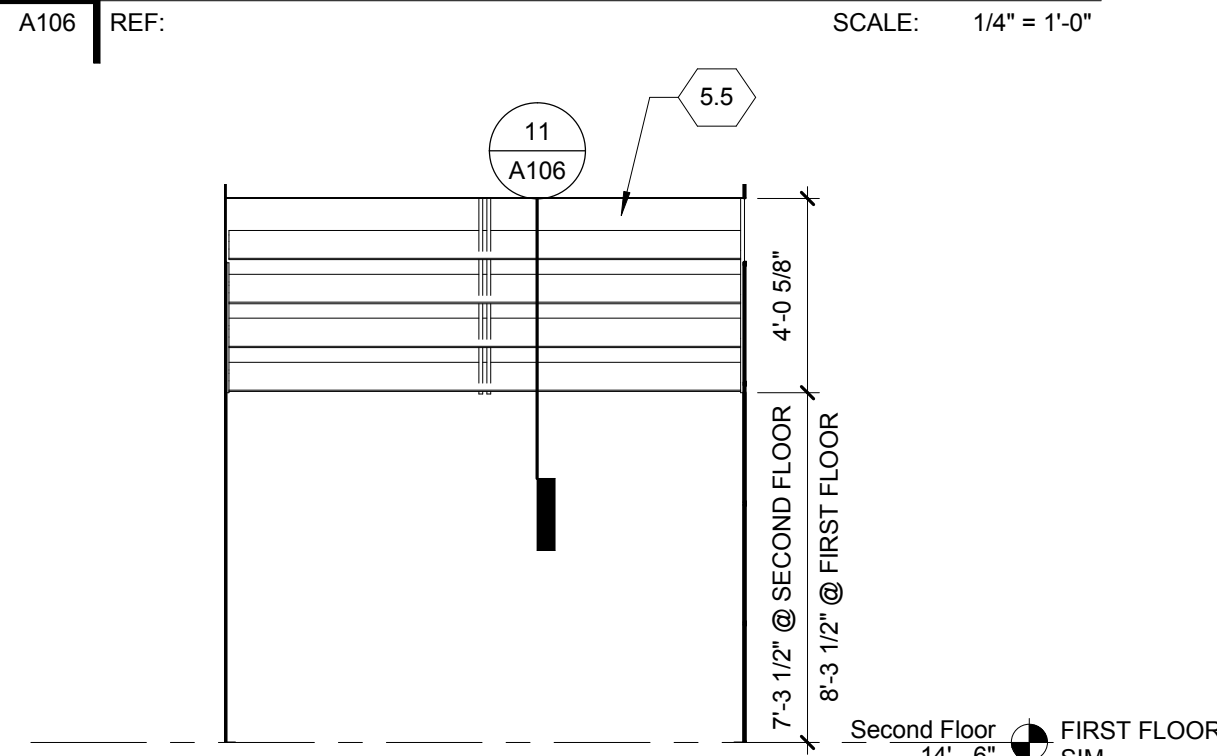
10 SHADE TYPE S2- SECTION



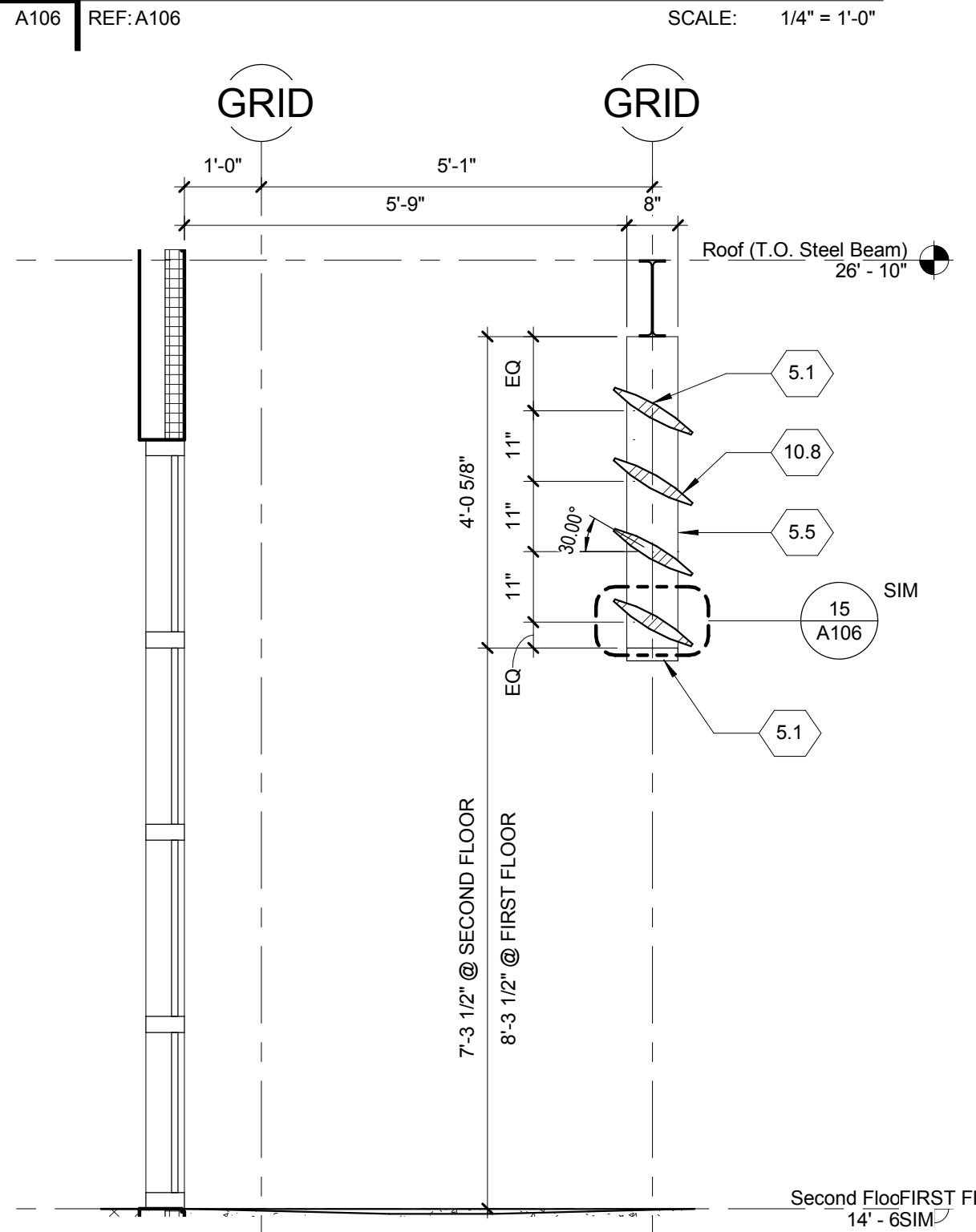
14 SHADE CONNECTION DETAIL @ END MULLION



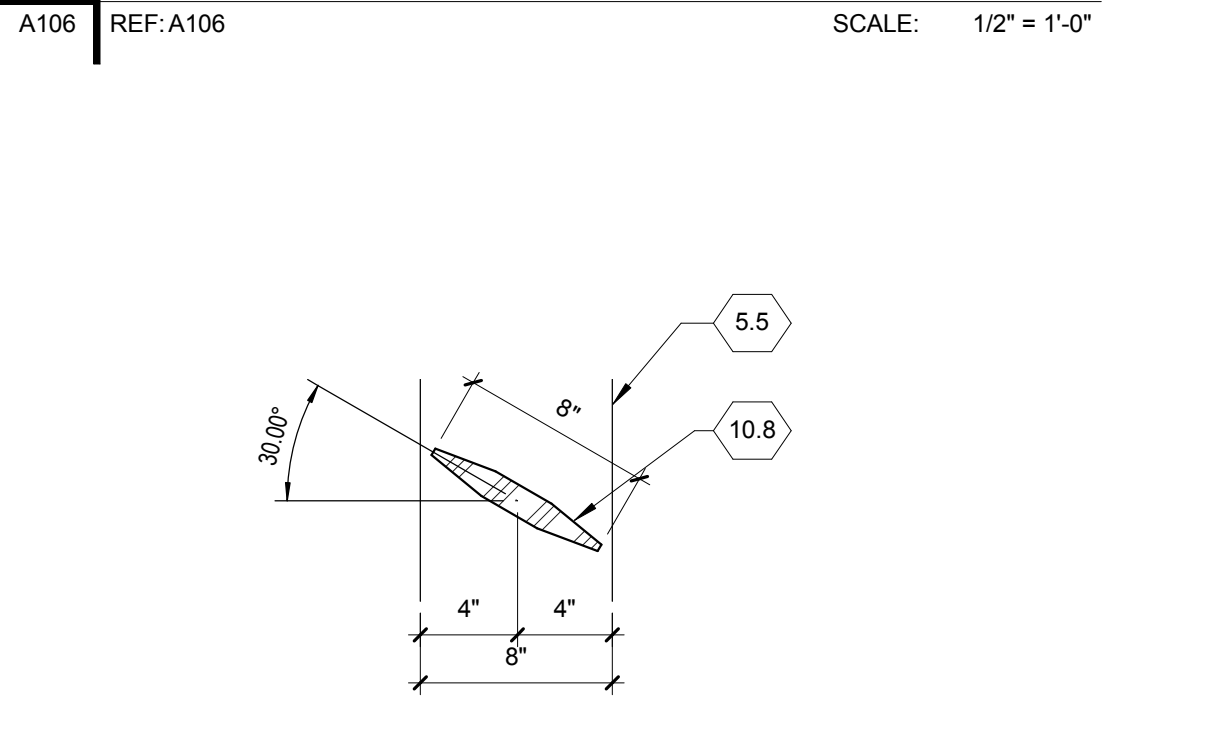
3 SHADE TYPE S3- PLAN



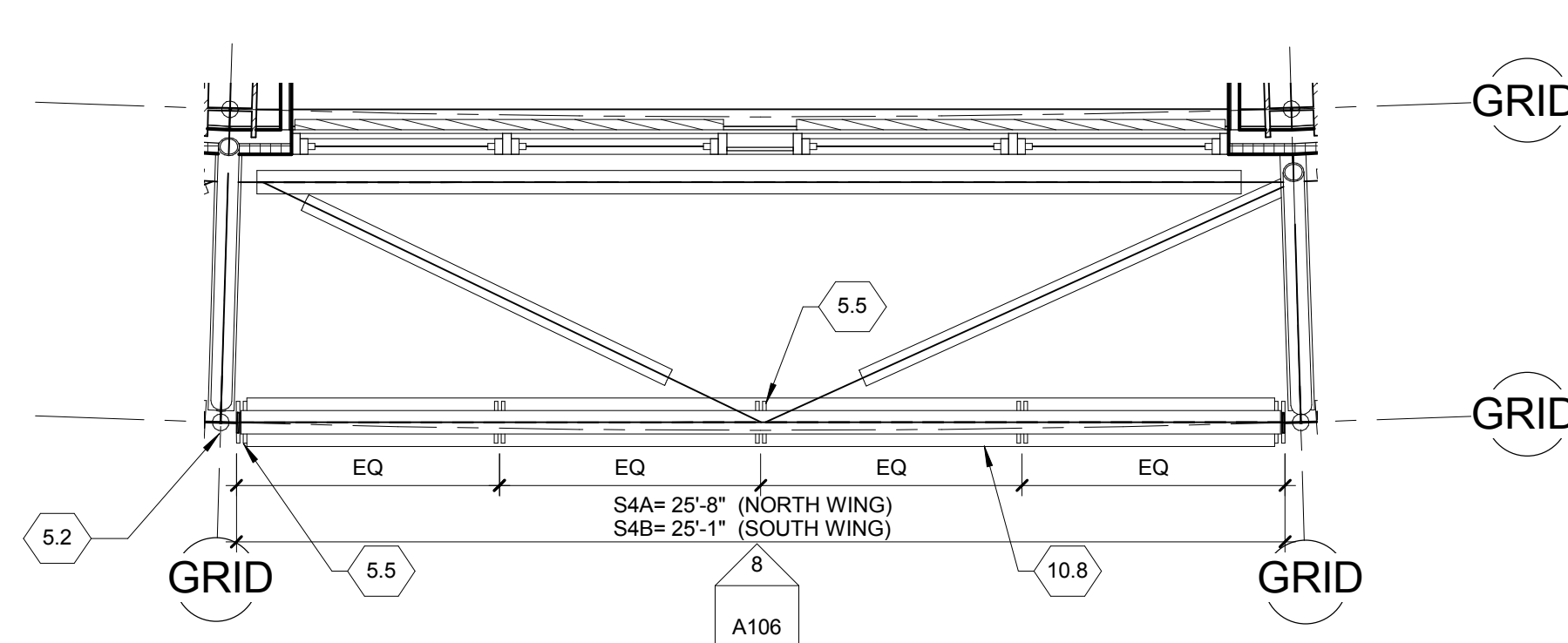
7 SHADE TYPE S3- ELEVATION



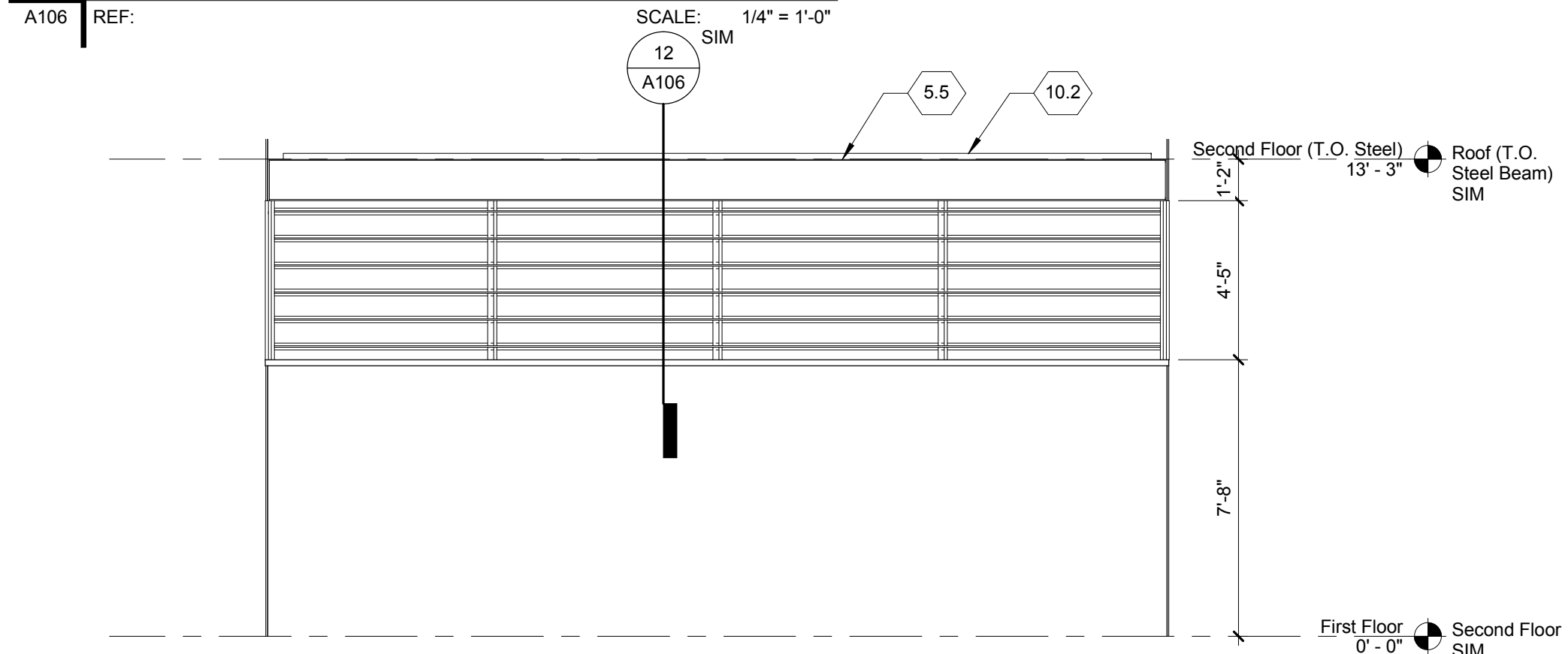
11 SHADE TYPE S3- SECTION



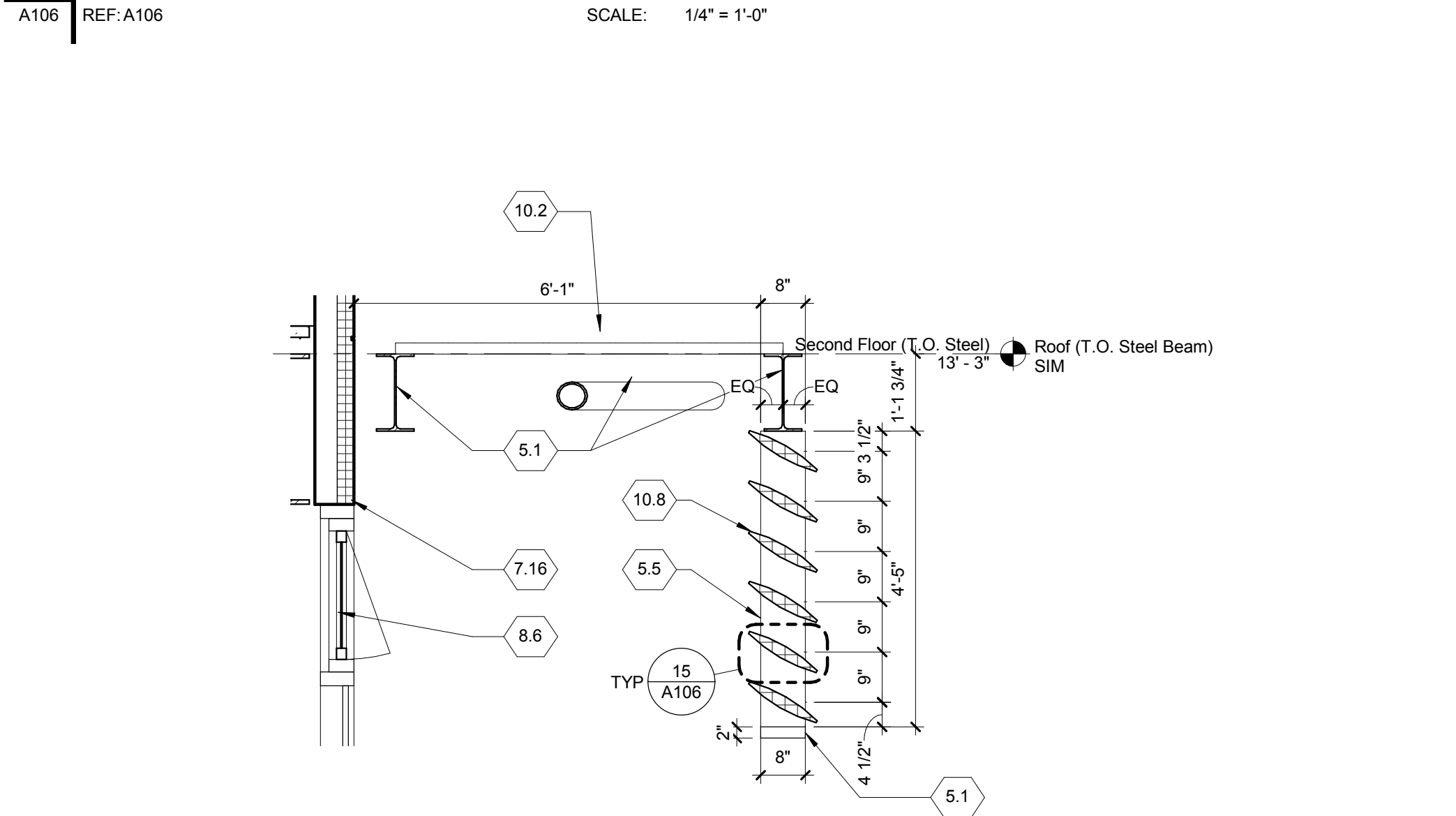
15 TYP AIRFOIL DETAIL



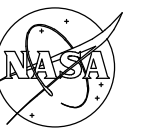
4 SHADE TYPE S4- PLAN

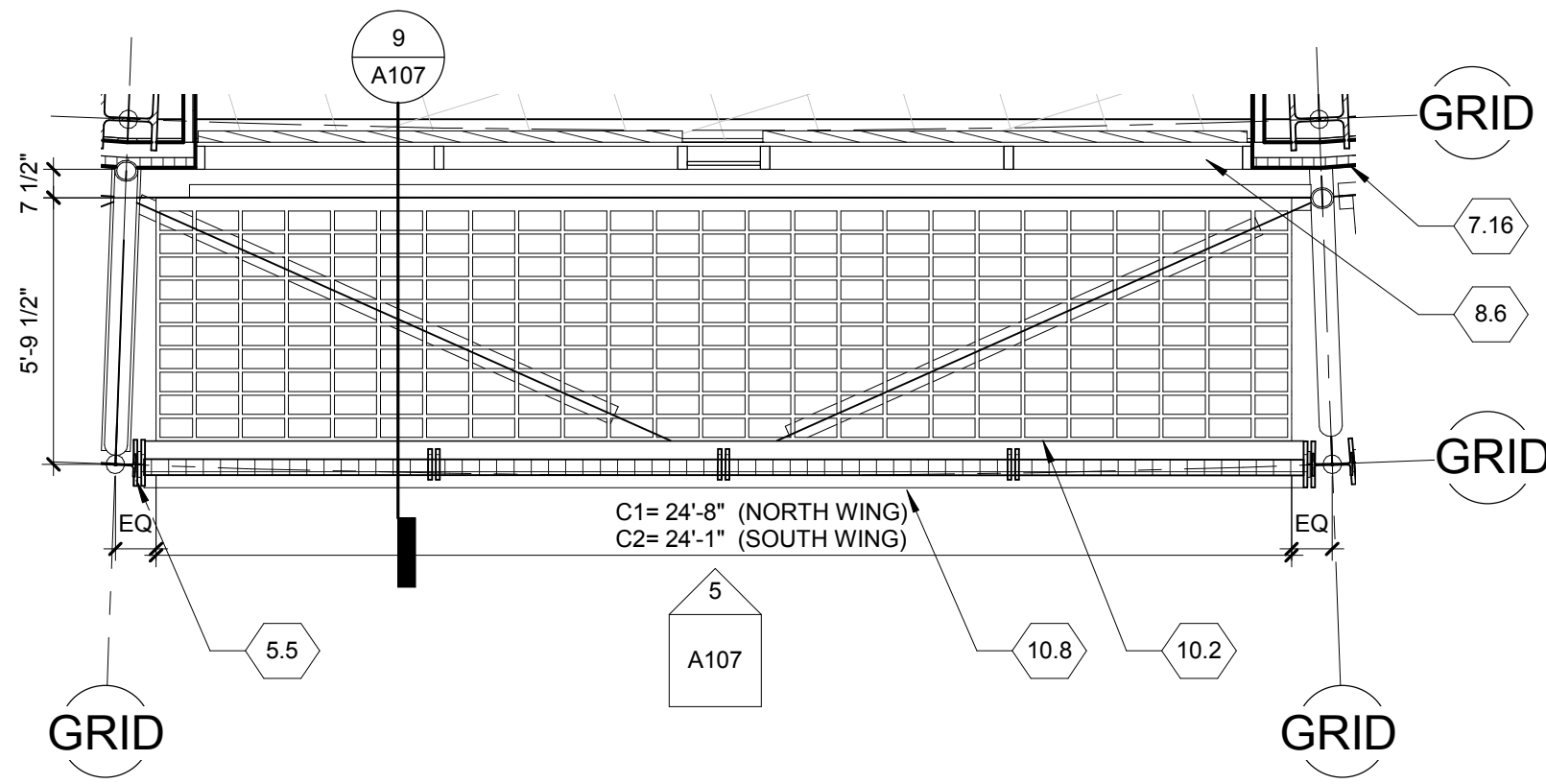


8 SHADE TYPE S4- ELEVATION

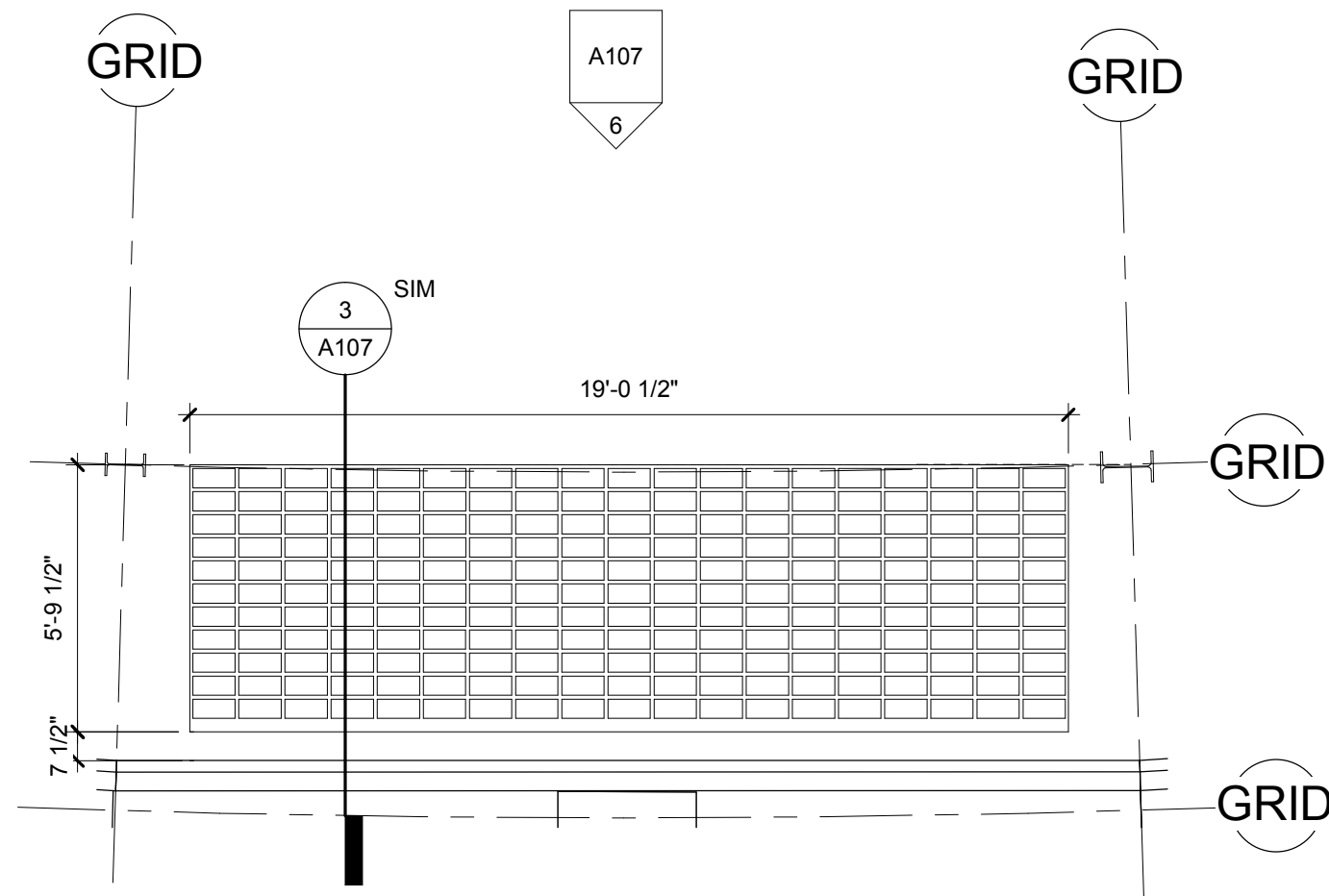


12 SHADE TYPE S4- SECTION

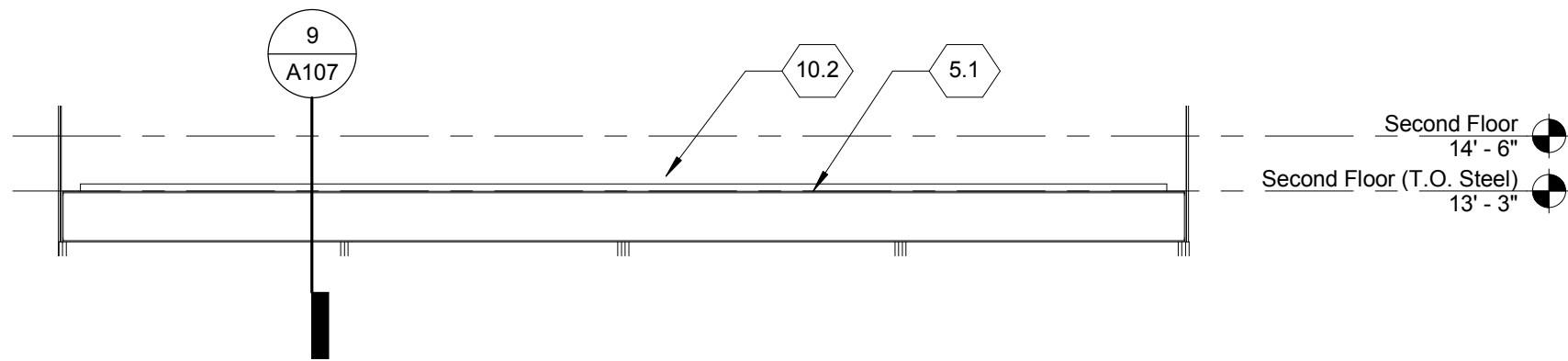
PROJECT STATUS		
PRELIMINARY - NOT FOR CONSTRUCTION		
ISSUE	DATE	DESCRIPTION
1	10/20/2008	30% PRICING
2	11/07/2008	30% DESIGN REVISION
3	12/12/2008	60% INTERNAL QA/QC & COST ESTIMATE
4	12/19/2008	60% PRE-FINAL, NASA REVIEW
5	01/19/2009	60% FINAL ISSUE TO NASA
6	02/16/2009	90% QA/QC & COST ESTIMATE
MARK	DATE	DESCRIPTION
DRAWN	G JOHNSON	
DESIGNED	WM+P	
CHECKED	R PRADHAN	
PROJ/MGR		
REQUESTOR		
R&QA		
SAFETY		
SUPERVISOR		
 Ames Research Center Moffet Field, California		
N232 COLLABORATIVE SUPPORT FACILITY		
VERTICAL SHADE LOUVER TYPES		
SIZE	CAGE CODE	REV
D	25307	A106
SCALE	INDEX	SHEET OF



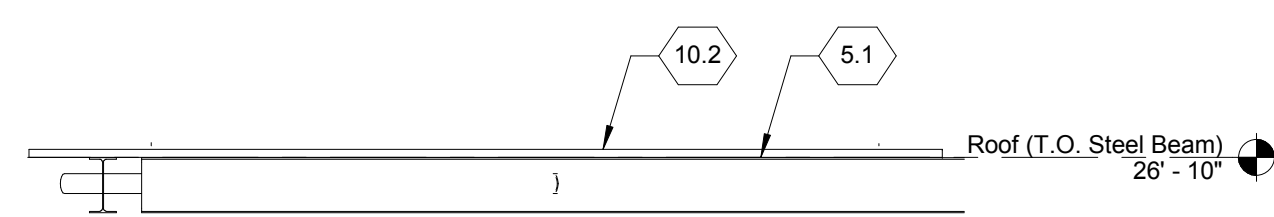
1 SHADE TYPE S5- PLAN
A107 REF: SCALE: 1/4" = 1'-0"



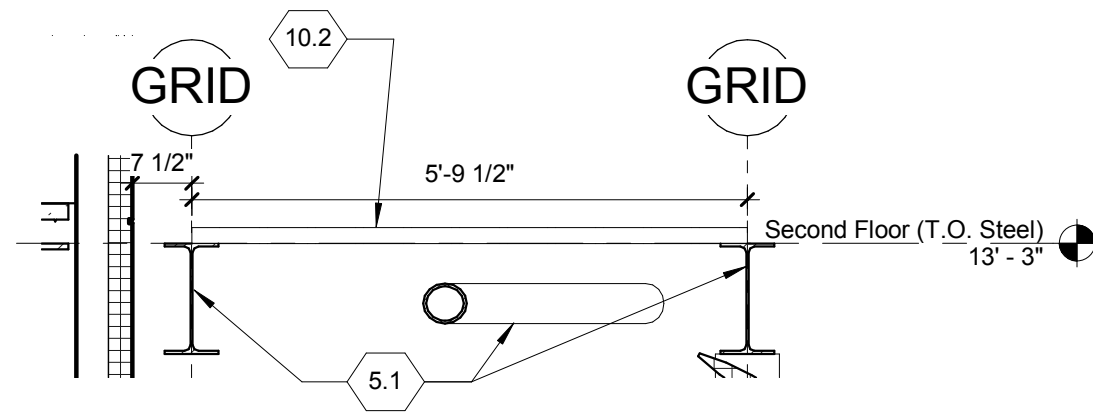
2 SHADE TYPE S6- PLAN
A107 REF: SCALE: 1/4" = 1'-0"



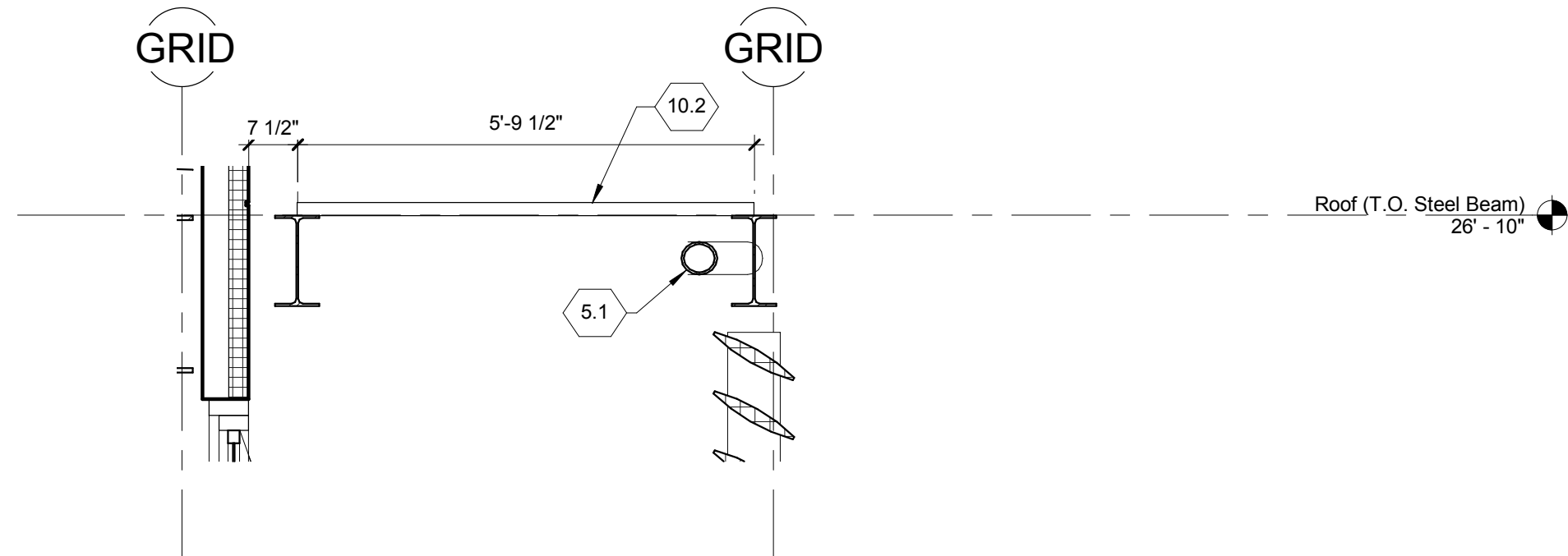
5 SHADE TYPE S5- ELEVATION
A107 REF: A107 SCALE: 1/4" = 1'-0"



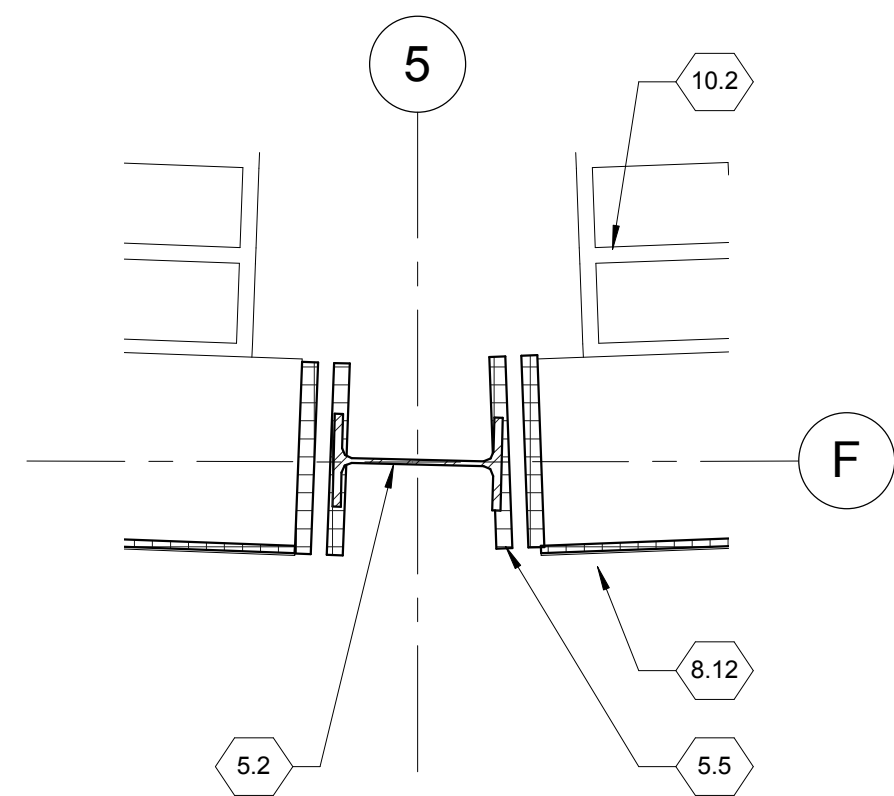
6 SHADE TYPE S6- ELEVATION
A107 REF: A107 SCALE: 1/4" = 1'-0"



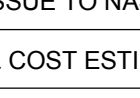
9 SHADE TYPE S5- SECTION
A107 REF: A107 SCALE: 1/2" = 1'-0"

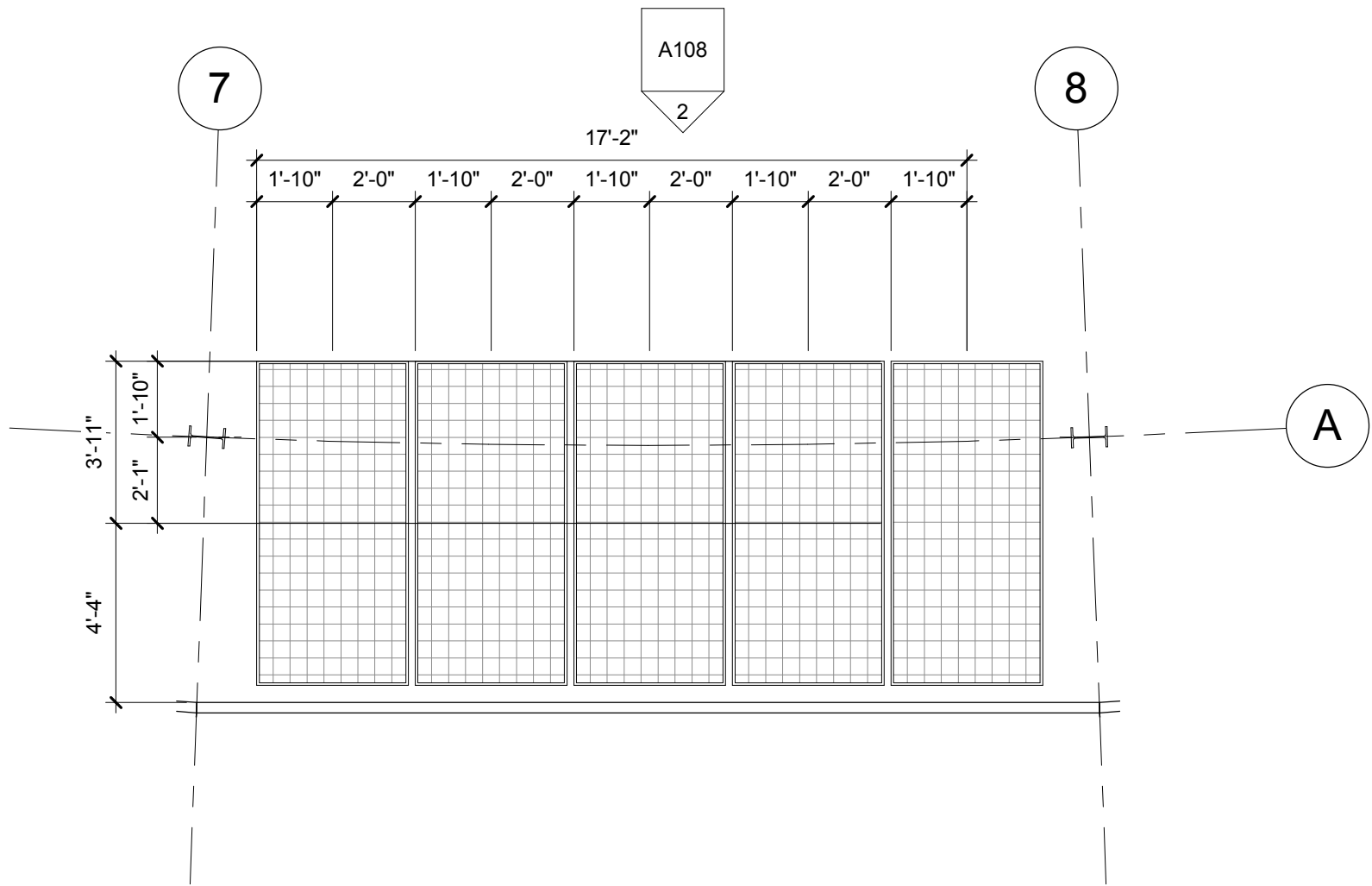


3 SHADE TYPE S6- SECTION
A107 REF: A107 SCALE: 1/2" = 1'-0"

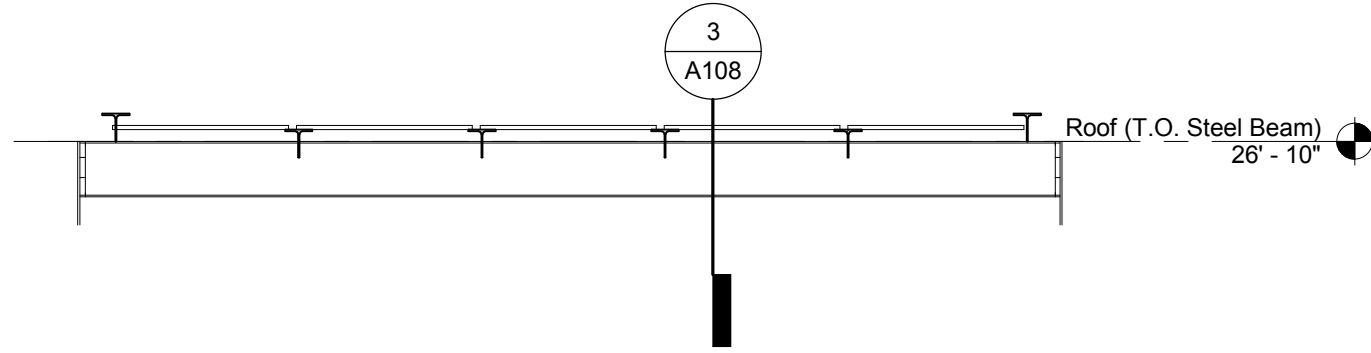


12 SHADE CONNECTION DETAIL
A107 REF: SCALE: 1" = 1'-0"

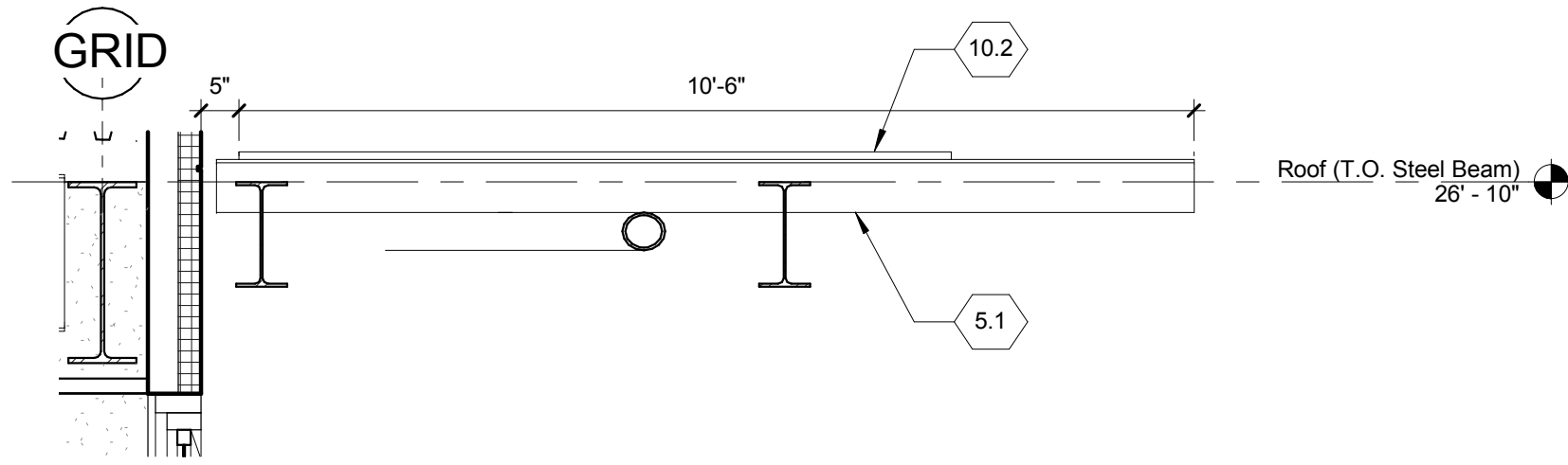
PROJECT STATUS						
PRELIMINARY - NOT FOR CONSTRUCTION						
ISSUE						
1	10/20/2008	30% PRICING				
2	11/07/2008	30% DESIGN REVISION				
3	12/12/2008	60% INTERNAL QA/QC & COST ESTIMATE				
4	12/19/2008	60% PRE-FINAL, NASA REVIEW				
5	01/19/2009	60% FINAL ISSUE TO NASA				
6	02/16/2009	90% QAQC & COST ESTIMATE				
MARK	DATE	DESCRIPTION				
DRAWN	G JOHNSON	<div><div>Ames Research Center Moffet Field, California</div><p>N232 COLLABORATIVE SUPPORT FACILITY</p><p>HORIZONTAL SHADE TYPES</p></div>				
DESIGNED	WM+P					
CHECKED	R PRADHAN					
PROJ/MGR						
REQUESTOR						
R&GA						
SAFETY						
SUPERVISOR		SIZE	CAGE CODE		REV	
		D	25307	A232-0800-	A107	
		SCALE		INDEX	SHEET	OF



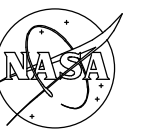
1 CANOPY TYPE C1- PLAN
A108 REF: SCALE: 1/4" = 1'-0"



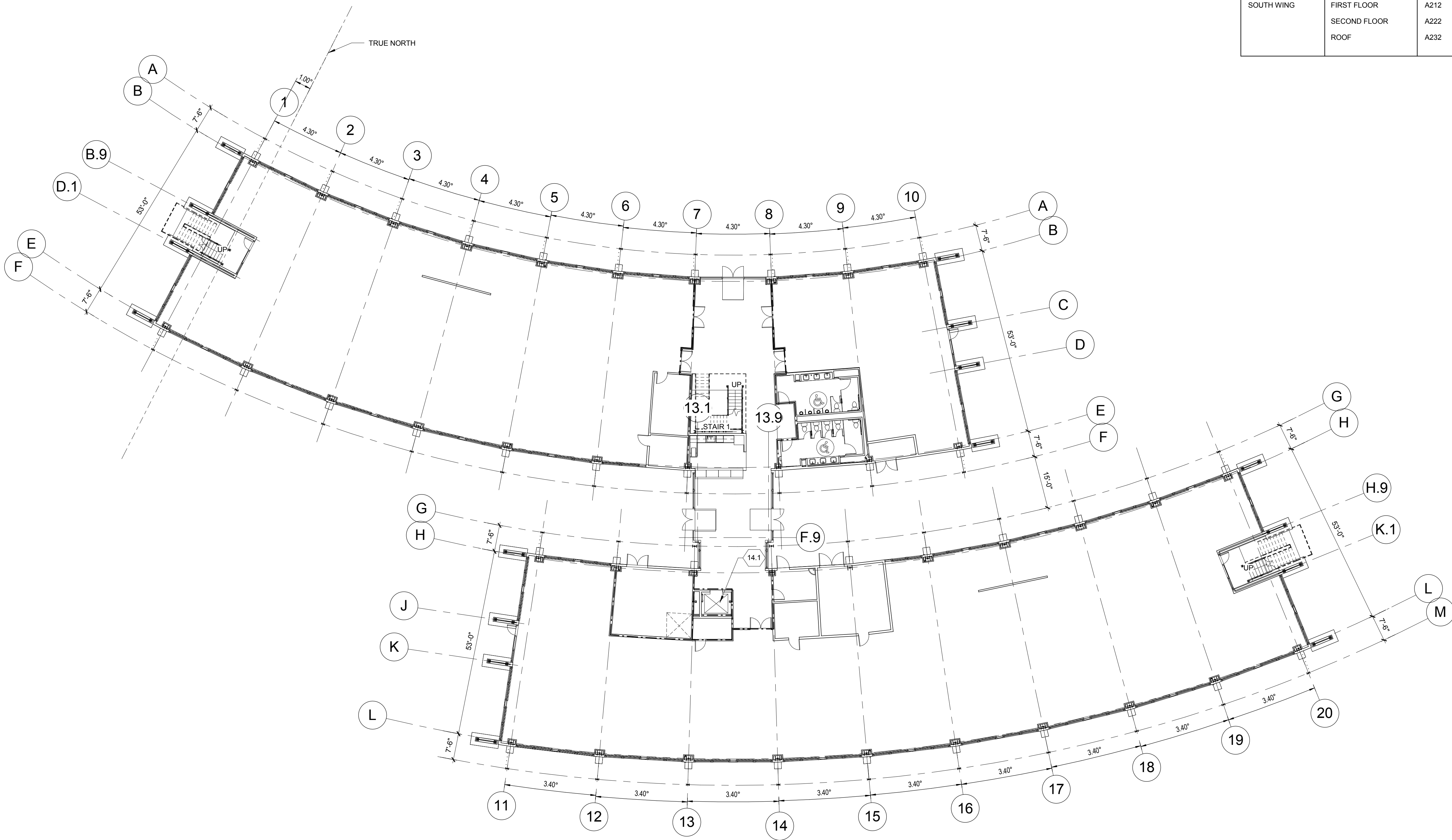
2 CANOPY TYPE C1- ELEVATION
A108 REF: A108 SCALE: 1/4" = 1'-0"



3 CANOPY TYPE C1-SECTION
A108 REF: A108 SCALE: 1/2" = 1'-0"

PROJECT STATUS		
PRELIMINARY - NOT FOR CONSTRUCTION		
ISSUE	DATE	DESCRIPTION
1	10/20/2008	30% PRICING
2	11/07/2008	30% DESIGN REVISION
3	12/12/2008	60% INTERNAL QA/QC & COST ESTIMATE
4	12/19/2008	60% PRE-FINAL, NASA REVIEW
5	01/19/2009	60% FINAL ISSUE TO NASA
6	02/16/2009	90% QAQC & COST ESTIMATE
MARK	DATE	DESCRIPTION
DRAWN	Author	<div>Ames Research Center Moffet Field, California</div>
DESIGNED	Designer	
CHECKED	Checker	
PROJ/MGR		
REQUESTOR		
R&GA		<div>N232 COLLABORATIVE SUPPORT FACILITY</div> <div>BIPV CANOPY TYPES</div>
SAFETY		
SUPERVISOR		
SIZE	CASE CODE	REV
D	25307	A232-0800- A108
SCALE	INDEX	SHEET OF

2/16/2009 6:13:26 PM



OVERALL KEYPLAN LEGEND

	LEVEL	FLOOR PLAN	REFLECTED CEILING PLAN
NORTH WING	FIRST FLOOR	A211	A241
	SECOND FLOOR	A221	A251
	ROOF	A231	-
SOUTH WING	FIRST FLOOR	A212	A242
	SECOND FLOOR	A222	A252
	ROOF	A232	-

NOTE:
1. SEE SHEET A100 FOR GRID GEOMETRY AND OVERALL GRID RADII DIMENSIONS

PRELIMINARY - NOT FOR CONSTRUCTION

ISSUE	DATE	DESCRIPTION
1	10/20/2008	30% PRICING
2	11/07/2008	30% DESIGN REVISION
3	12/12/2008	60% INTERNAL QA/QC & COST ESTIMATE
4	12/19/2008	60% PRE-FINAL, NASA REVIEW
5	01/19/2009	60% FINAL ISSUE TO NASA
6	02/16/2009	90% QA/QC & COST ESTIMATE

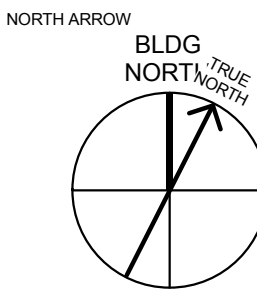
MARK	DATE	DESCRIPTION
DRAWN	G JOHNSON	DATE
DESIGNED	WMHP	DATE
CHECKED	R PRADHAN	DATE
PROJ/MGR		DATE
REQUESTOR		DATE
R&GA		DATE
SAFETY		DATE
SUPERVISOR		DATE
SIZE	SCALE	INDEX
D	25307	A232-0800-
		A200
		REV
		OF

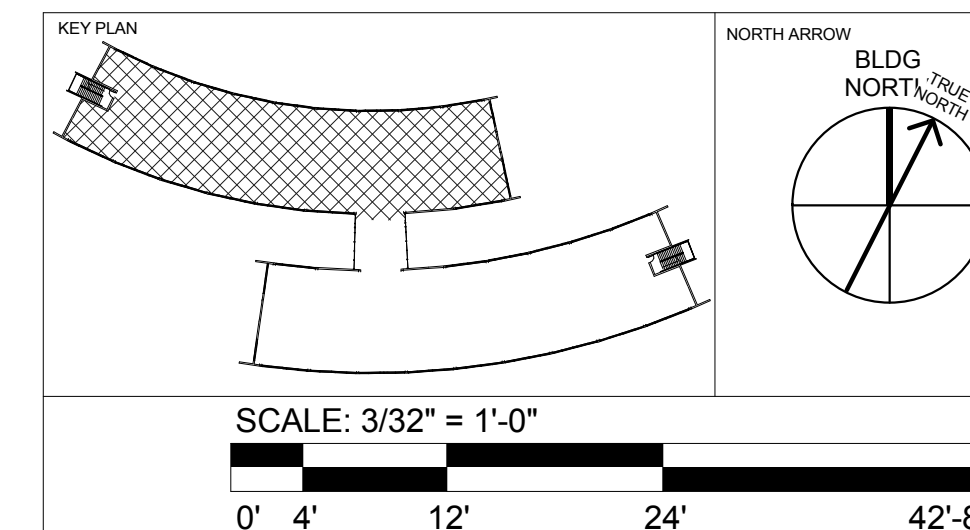
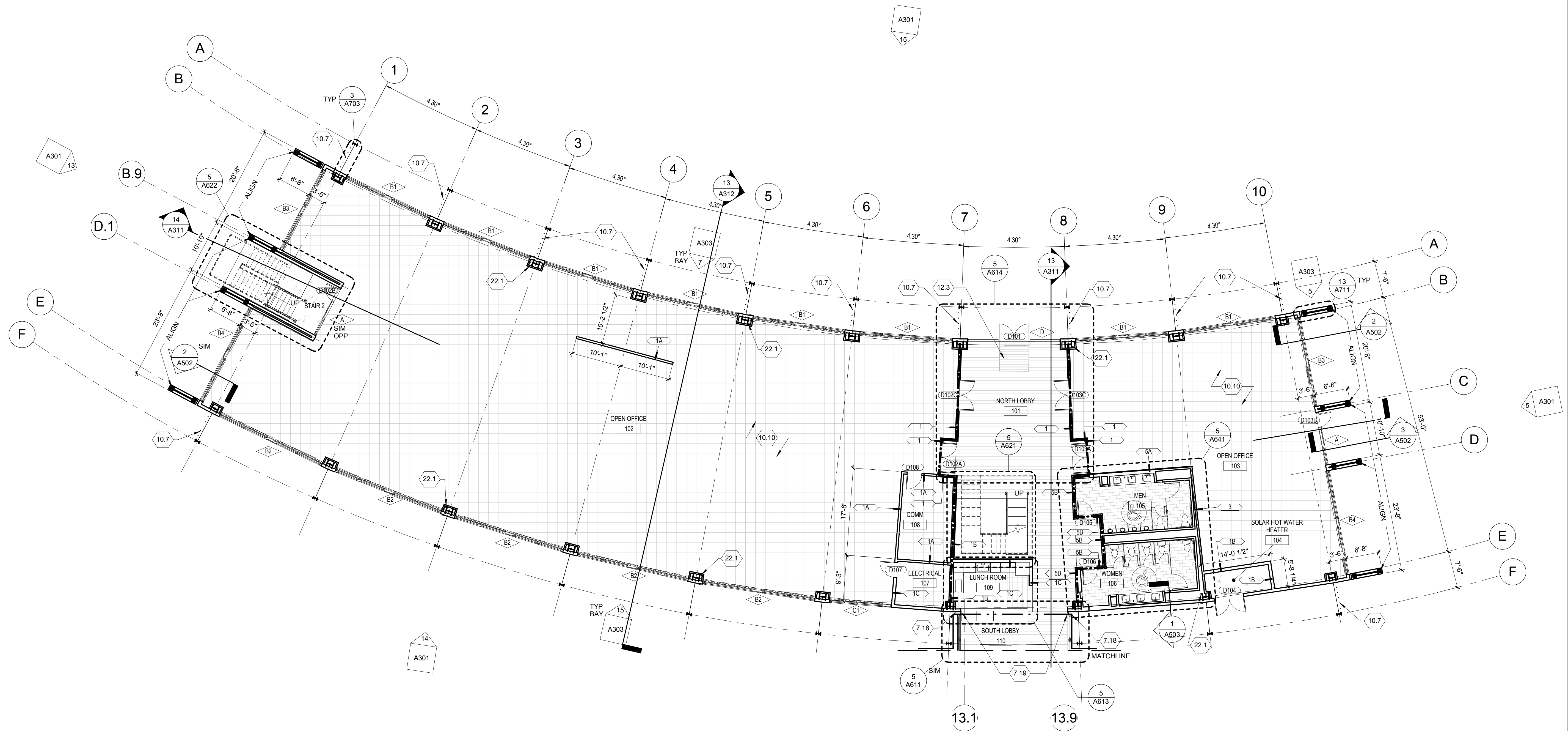
 **Ames Research Center**
Moffet Field, California

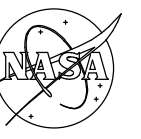
N232 COLLABORATIVE SUPPORT FACILITY

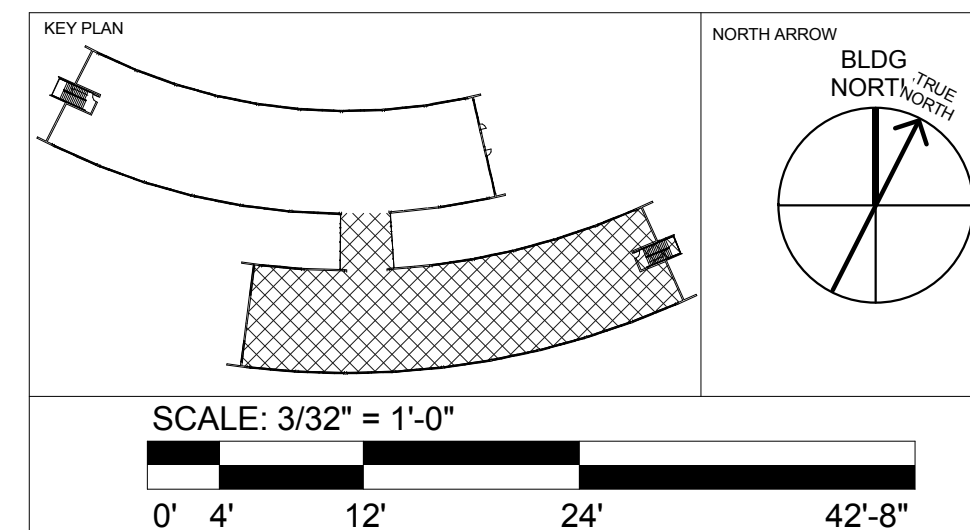
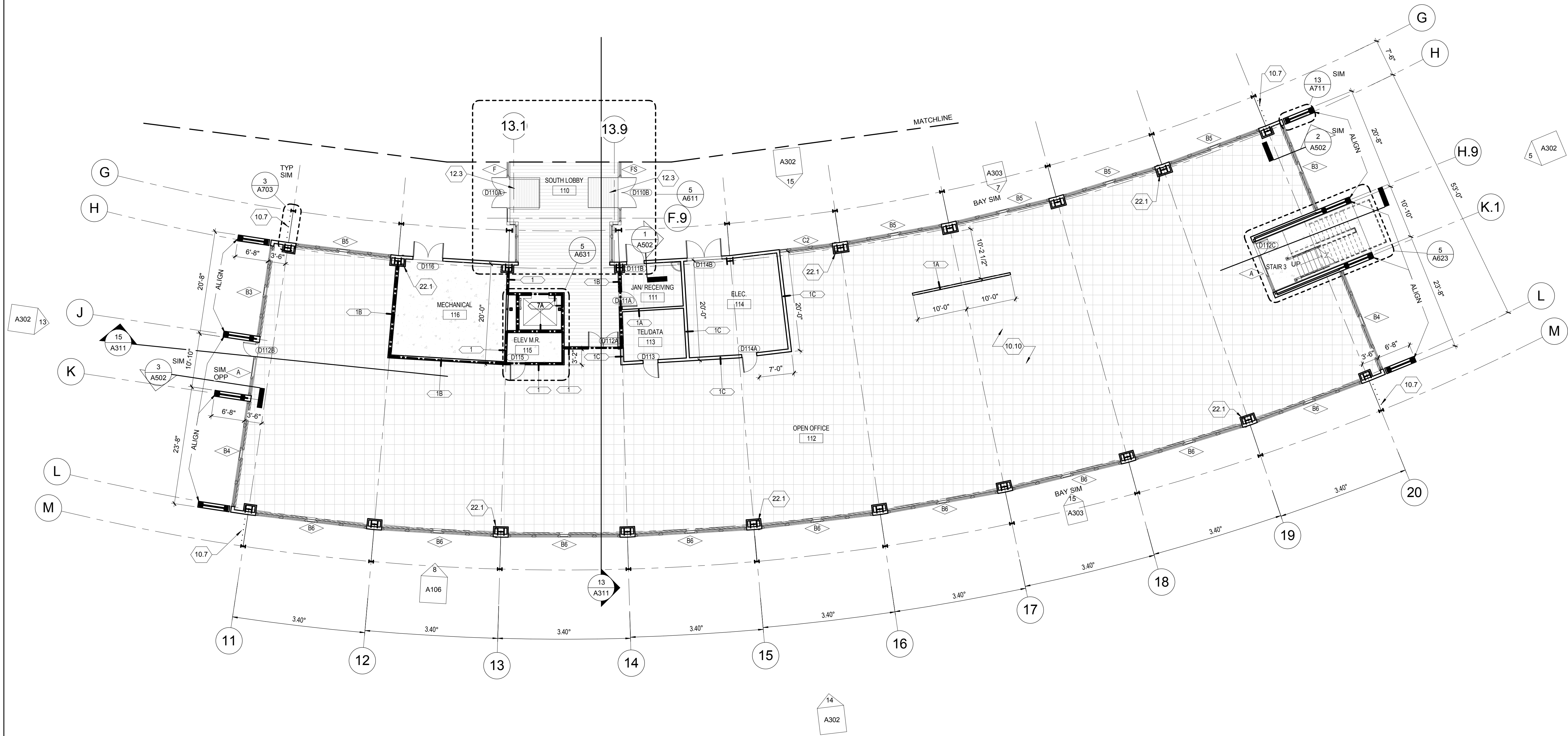
ARCHITECTURAL KEY PLAN

SCALE: 1/16" = 1'-0"





PROJECT STATUS		
PRELIMINARY - NOT FOR CONSTRUCTION		
ISSUE	DATE	DESCRIPTION
1	10/20/2008	30% PRICING
2	11/07/2008	30% DESIGN REVISION
3	12/12/2008	60% INTERNAL QA/QC & COST ESTIMATE
4	12/19/2008	60% PRE-FINAL, NASA REVIEW
5	01/19/2009	60% FINAL ISSUE TO NASA
6	02/16/2009	90% QA/QC & COST ESTIMATE
MARK	DATE	DESCRIPTION
DRAWN	G JOHNSON	
DESIGNED	WM + P	
CHECKED	R PRADHAN	
PROJ/MGR		
REQUESTOR		
R&GA		
SAFETY		
SUPERVISOR		
 Ames Research Center Moffet Field, California		
N232 COLLABORATIVE SUPPORT FACILITY		
FIRST FLOOR PLAN - NORTH WING		
SIZE	CASE CODE	REV
D	25307	A232-0800- A211
SCALE	1/8"=1'-0"	INDEX
SHEET	OF	

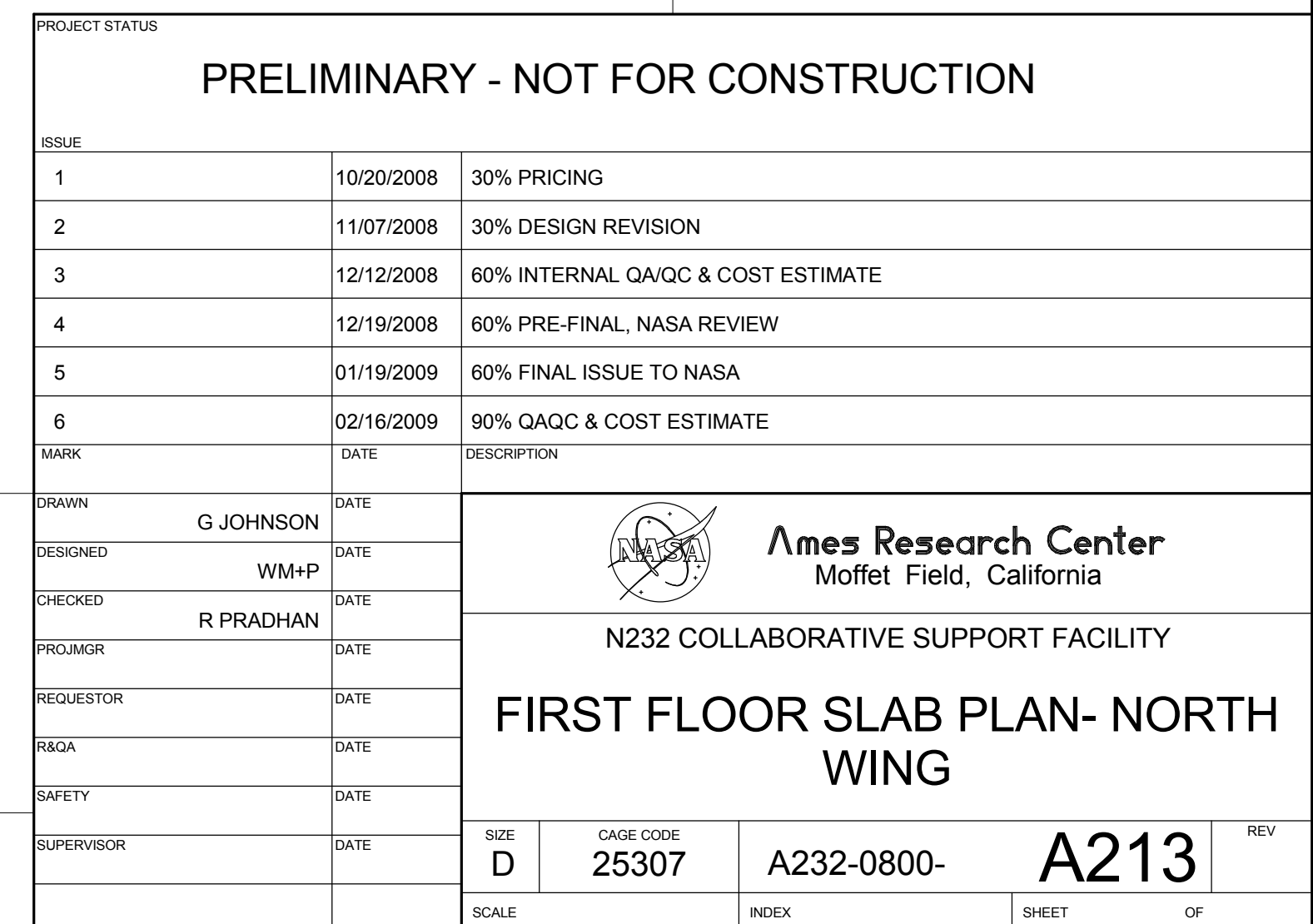


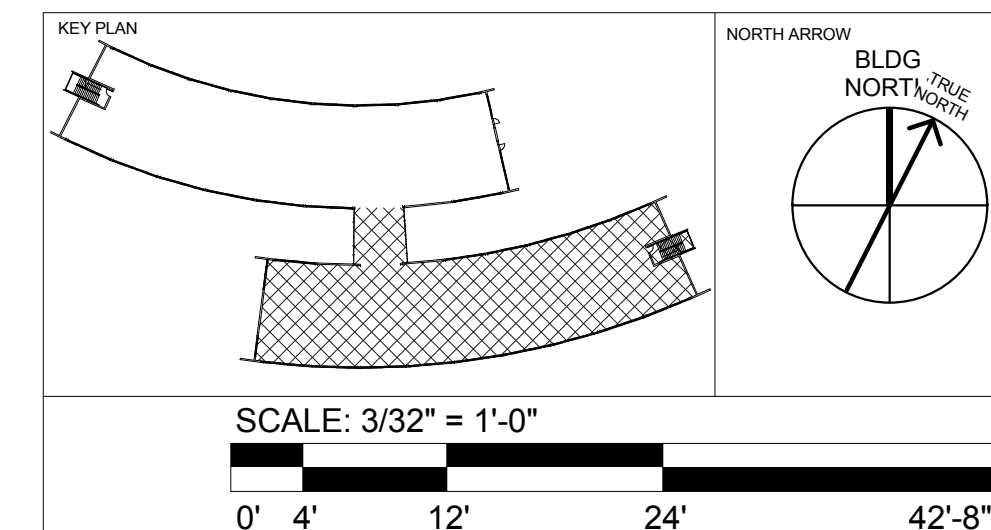
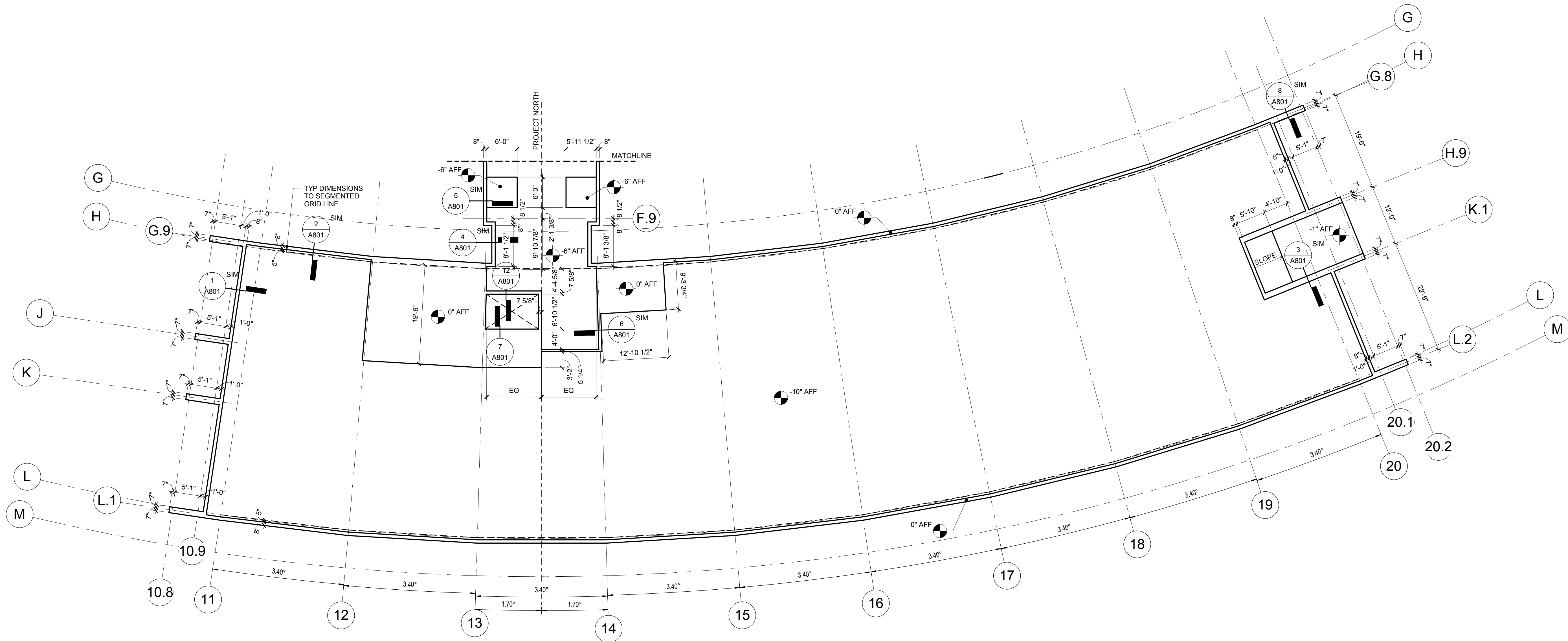
PROJECT STATUS		
PRELIMINARY - NOT FOR CONSTRUCTION		
ISSUE	DATE	DESCRIPTION
1	10/20/2008	30% PRICING
2	11/07/2008	30% DESIGN REVISION
3	12/12/2008	60% INTERNAL QA/QC & COST ESTIMATE
4	12/19/2008	60% PRE-FINAL, NASA REVIEW
5	01/19/2009	60% FINAL ISSUE TO NASA
6	02/16/2009	90% QA/QC & COST ESTIMATE
MARK	DATE	DESCRIPTION
DRAWN	Author	DATE
DESIGNED	Designer	DATE
CHECKED	Checker	DATE
PROJ/MGR		DATE
REQUESTOR		DATE
R&GA		DATE
SAFETY		DATE
SUPERVISOR		DATE
SIZE	CASE CODE	REV
D	25307	A212
SCALE	INDEX	SHEET OF

 **Ames Research Center**
Moffet Field, California

N232 COLLABORATIVE SUPPORT FACILITY

FIRST FLOOR PLAN - SOUTH WING

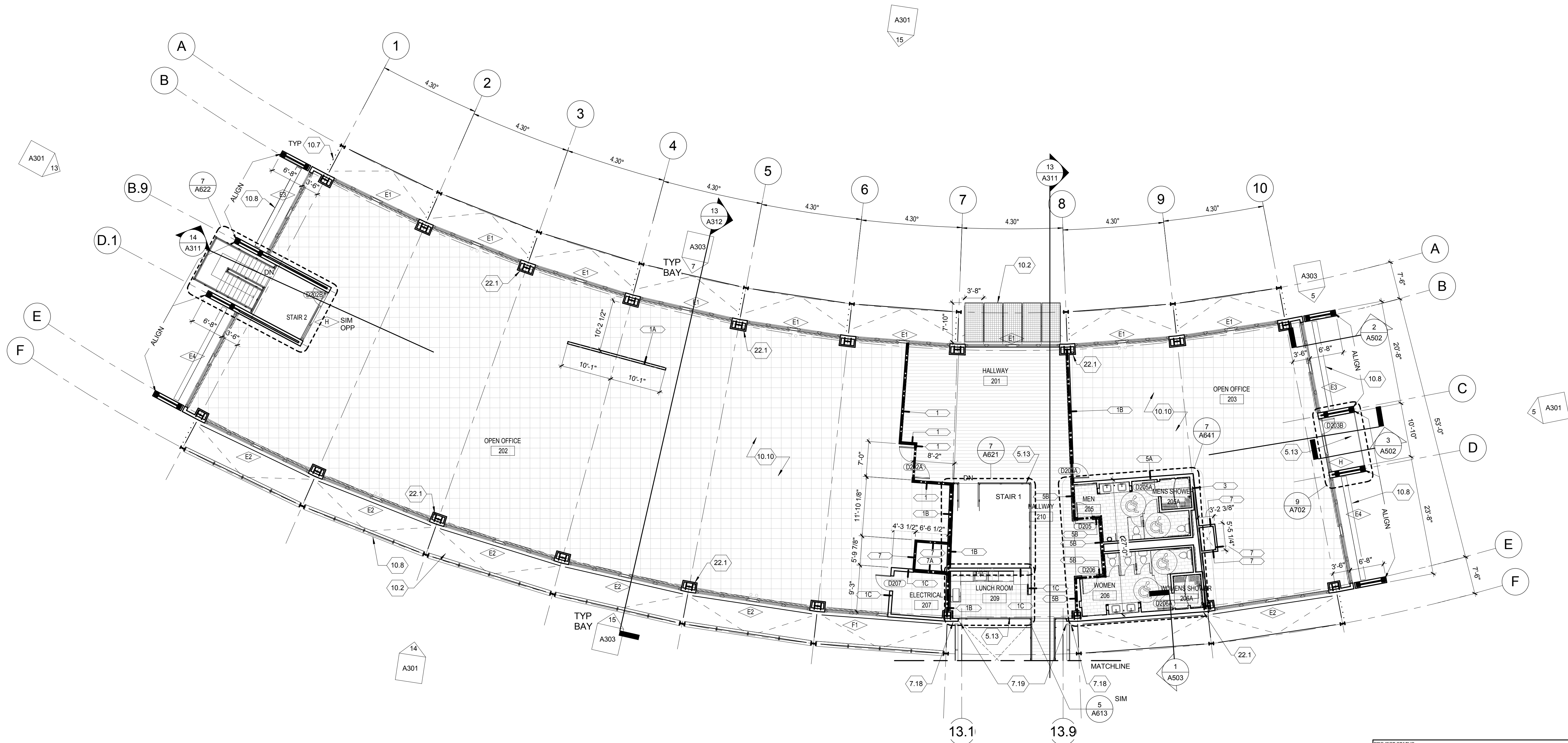




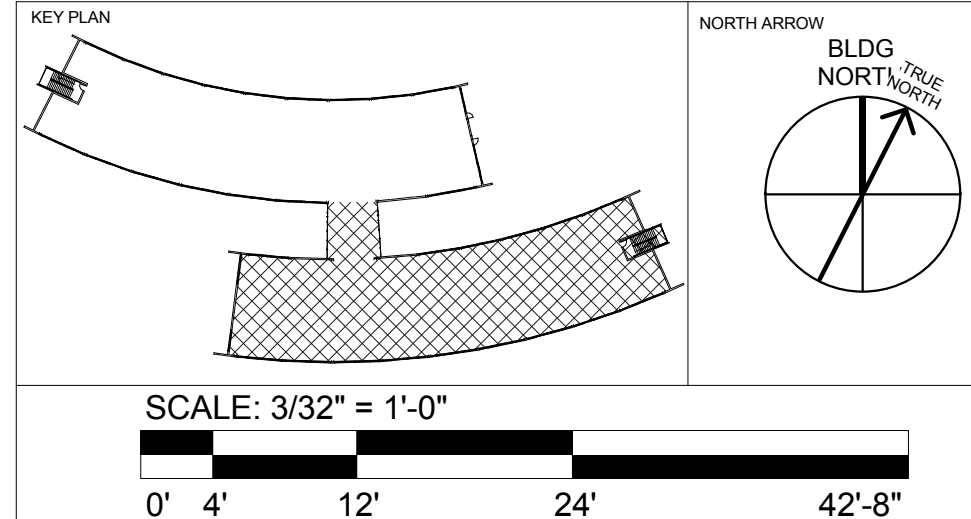
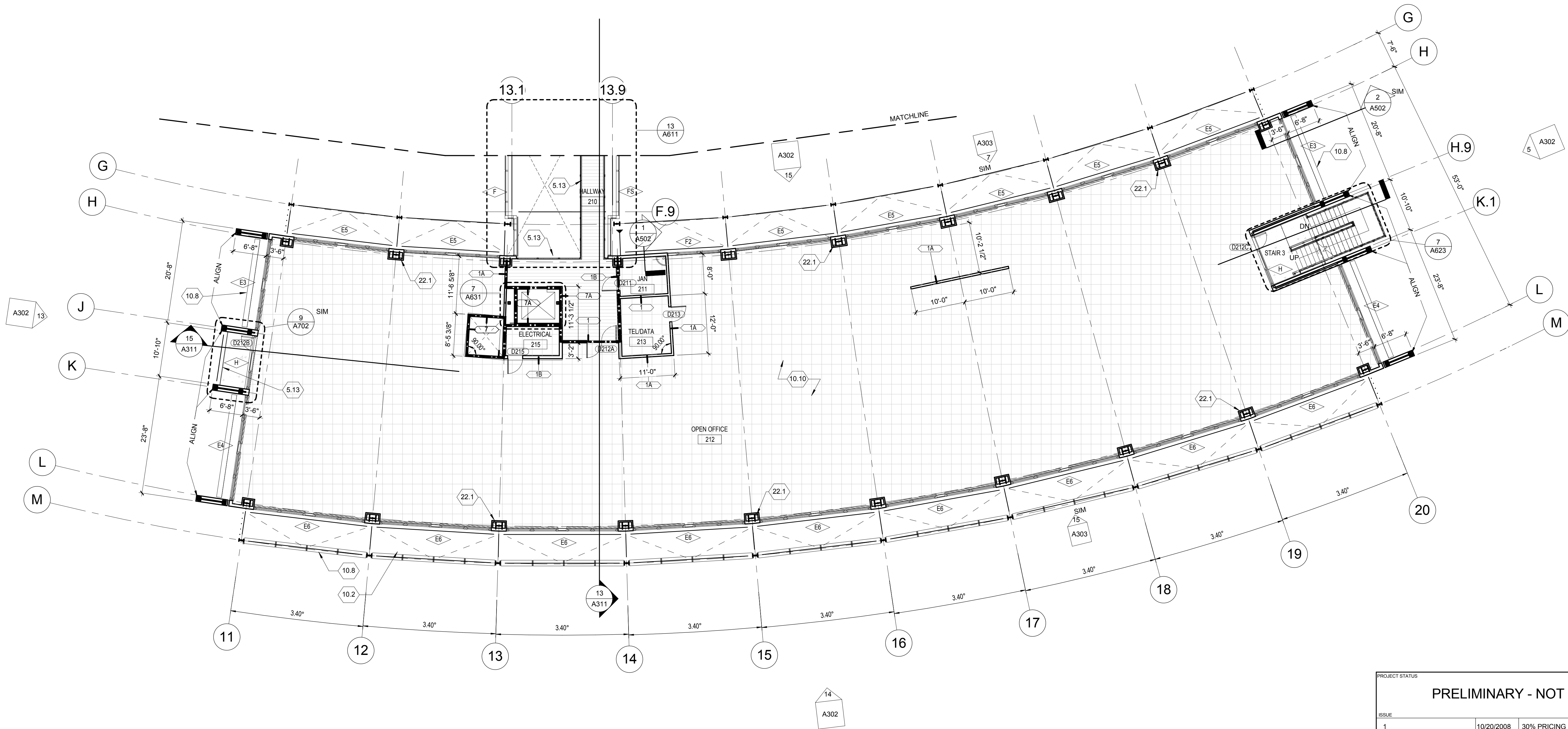
PROJECT STATUS		
PRELIMINARY - NOT FOR CONSTRUCTION		
ISSUE	DATE	DESCRIPTION
1	10/20/2008	30% PRICING
2	11/07/2008	30% DESIGN REVISION
3	12/12/2008	60% INTERNAL QA/QC & COST ESTIMATE
4	12/19/2008	60% PRE-FINAL, NASA REVIEW
5	01/19/2009	60% FINAL ISSUE TO NASA
6	02/16/2009	90% QA/QC & COST ESTIMATE
MARK	DATE	DESCRIPTION
DRAWN	G JOHNSON	DATE
DESIGNED	WMHP	DATE
CHECKED	R PRADHAN	DATE
PROJ/MGR		DATE
REQUESTOR		DATE
R&GA		DATE
SAFETY		DATE
SUPERVISOR		DATE
SIZE	D	CASE CODE
	25307	A232-0800-
SCALE		INDEX
		SHEET
		OF
FIRST FLOOR SLAB PLAN- SOUTH WING		REV
		A214



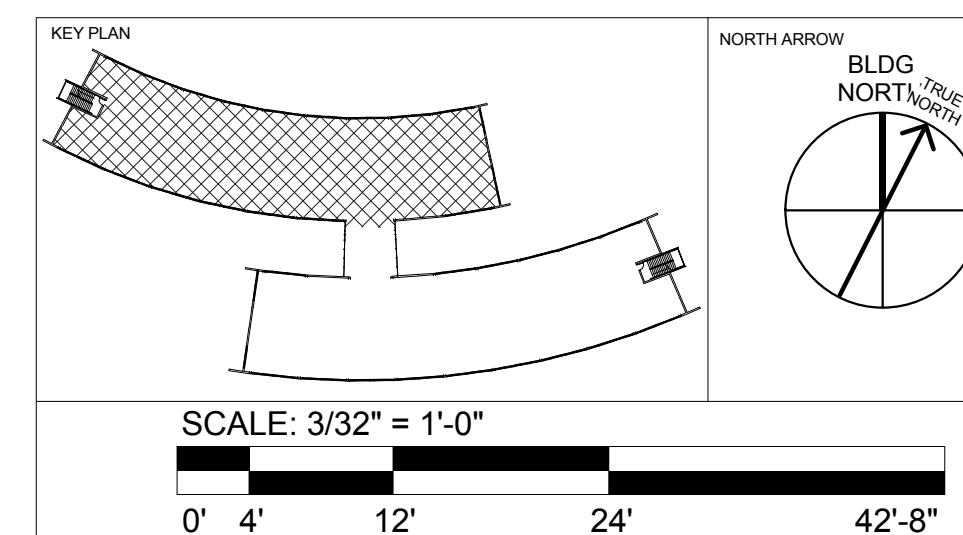
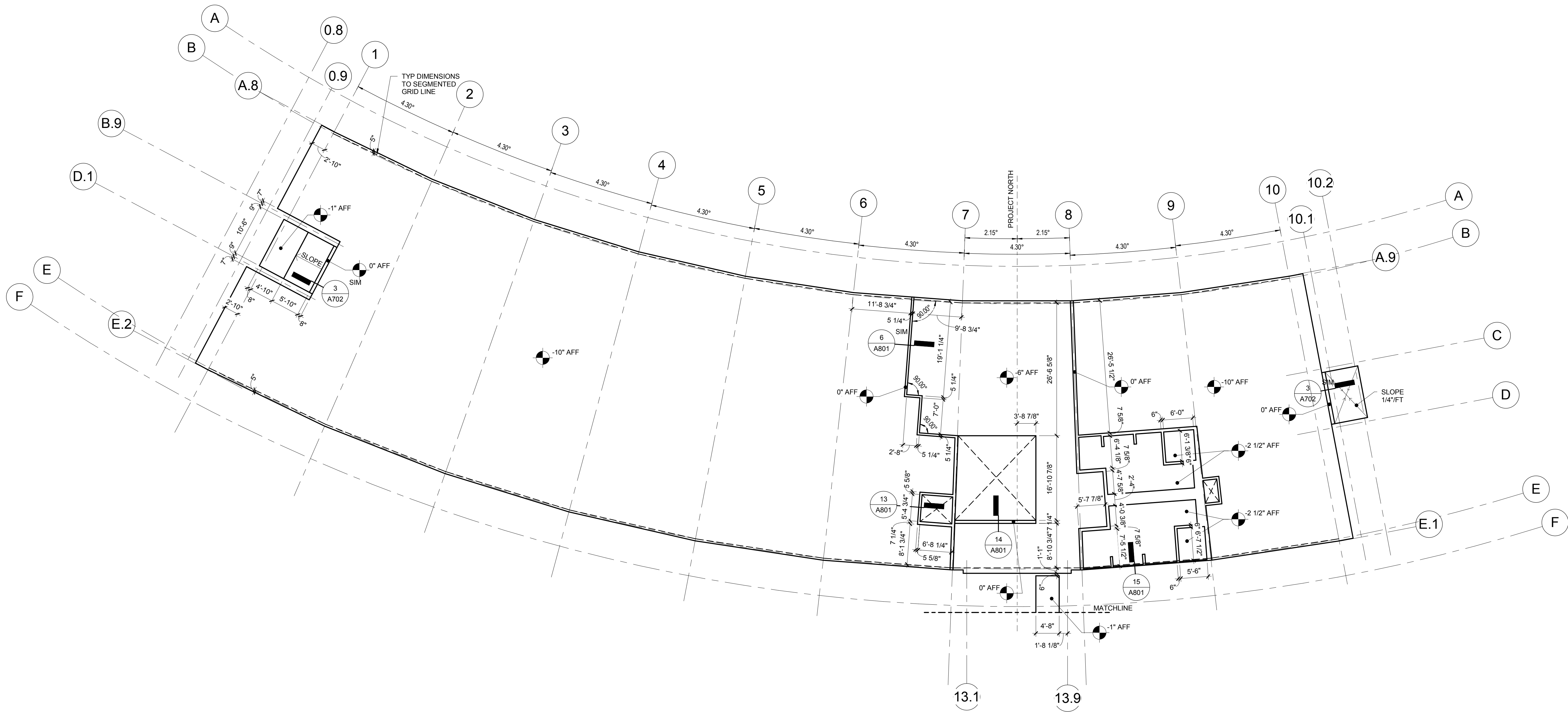
N332 COLLABORATIVE SUPPORT FACILITY



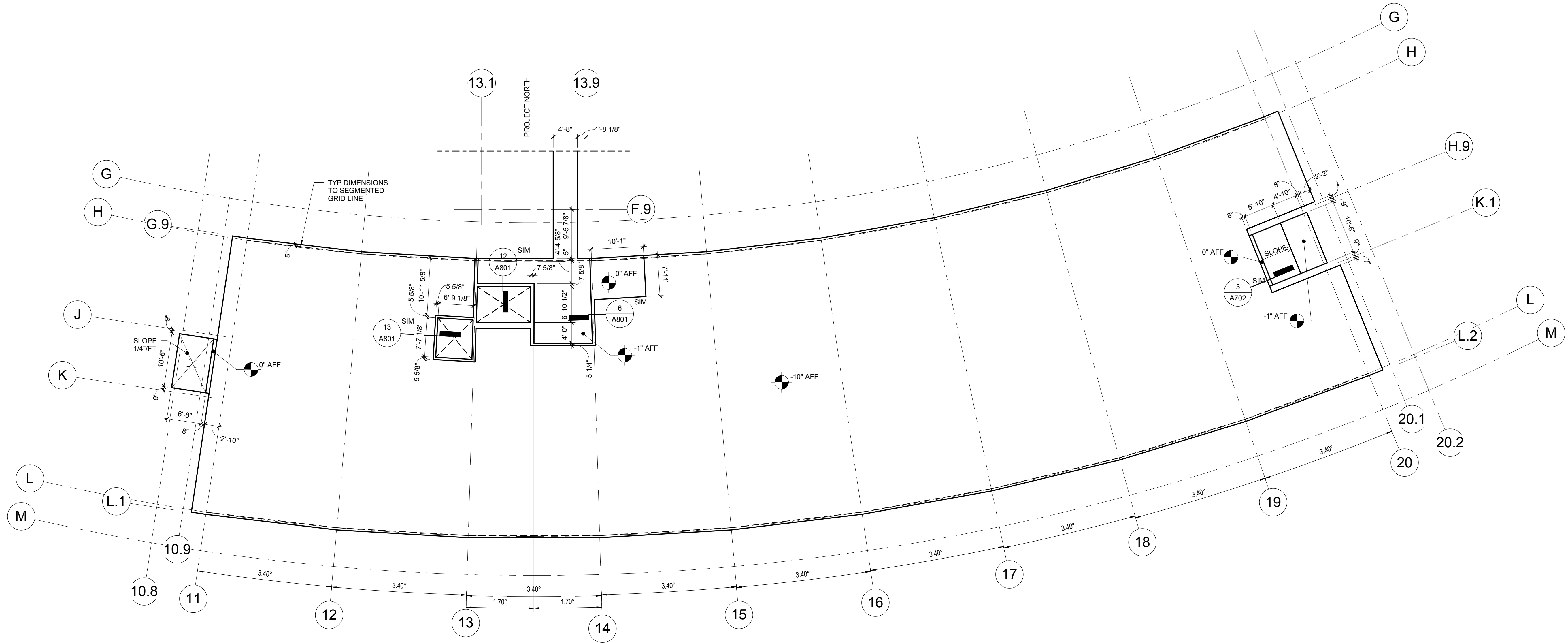
PROJECT STATUS		
PRELIMINARY - NOT FOR CONSTRUCTION		
ISSUE	DATE	DESCRIPTION
1	10/20/2008	30% PRICING
2	11/07/2008	30% DESIGN REVISION
3	12/12/2008	60% INTERNAL QA/QC & COST ESTIMATE
4	12/19/2008	60% PRE-FINAL, NASA REVIEW
5	01/19/2009	60% FINAL ISSUE TO NASA
6	02/16/2009	90% QA/QC & COST ESTIMATE
MARK	DATE	DESCRIPTION
DRAWN	G JOHNSON	DATE
DESIGNED	M + P	DATE
CHECKED	R PRADHAN	DATE
PROJ/MGR		DATE
REQUESTOR		DATE
R&GA		DATE
SAFETY		DATE
SUPERVISOR		DATE
SIZE	SCALE CODE	INDEX
D	25307	A232-0800-
SCALE		SHEET
		OF
Ames Research Center Moffet Field, California		
N232 COLLABORATIVE SUPPORT FACILITY		
SECOND FLOOR PLAN - NORTH WING		
A221		



PROJECT STATUS		
PRELIMINARY - NOT FOR CONSTRUCTION		
ISSUE	DATE	DESCRIPTION
1	10/20/2008	30% PRICING
2	11/07/2008	30% DESIGN REVISION
3	12/12/2008	60% INTERNAL QA/QC & COST ESTIMATE
4	12/19/2008	60% PRE-FINAL, NASA REVIEW
5	01/19/2009	60% FINAL ISSUE TO NASA
6	02/16/2009	90% QA/QC & COST ESTIMATE
MARK	DATE	DESCRIPTION
DRAWN	G JOHNSON	DATE
DESIGNED	WMHP	DATE
CHECKED	R PRADHAN	DATE
PROJ/MGR		DATE
REQUESTOR		DATE
R&GA		DATE
SAFETY		DATE
SUPERVISOR		DATE
SIZE	D	25307
SCALE		
INDEX		
SHEET		
OF		
Ames Research Center Moffet Field, California		
N232 COLLABORATIVE SUPPORT FACILITY		
SECOND FLOOR PLAN - SOUTH WING		
SCALE	3/32" = 1'-0"	
INDEX		
SHEET		
OF		
REV		
A222		



PROJECT STATUS		
PRELIMINARY - NOT FOR CONSTRUCTION		
ISSUE	DATE	DESCRIPTION
1	10/20/2008	30% PRICING
2	11/07/2008	30% DESIGN REVISION
3	12/12/2008	60% INTERNAL QA/QC & COST ESTIMATE
4	12/19/2008	60% PRE-FINAL, NASA REVIEW
5	01/19/2009	60% FINAL ISSUE TO NASA
6	02/16/2009	90% QA/QC & COST ESTIMATE
MARK	DATE	DESCRIPTION
DRAWN	G JOHNSON	DATE
DESIGNED	WM+P	DATE
CHECKED	R PRADHAN	DATE
PROJ/MGR		DATE
REQUESTOR		DATE
R&GA		DATE
SAFETY		DATE
SUPERVISOR		DATE
SIZE	D	CASE CODE 25307
SCALE		INDEX
A232-0800-		A223
SECOND FLOOR SLAB PLAN-NORTH WING		REV
Ames Research Center Moffet Field, California		OF
N232 COLLABORATIVE SUPPORT FACILITY		



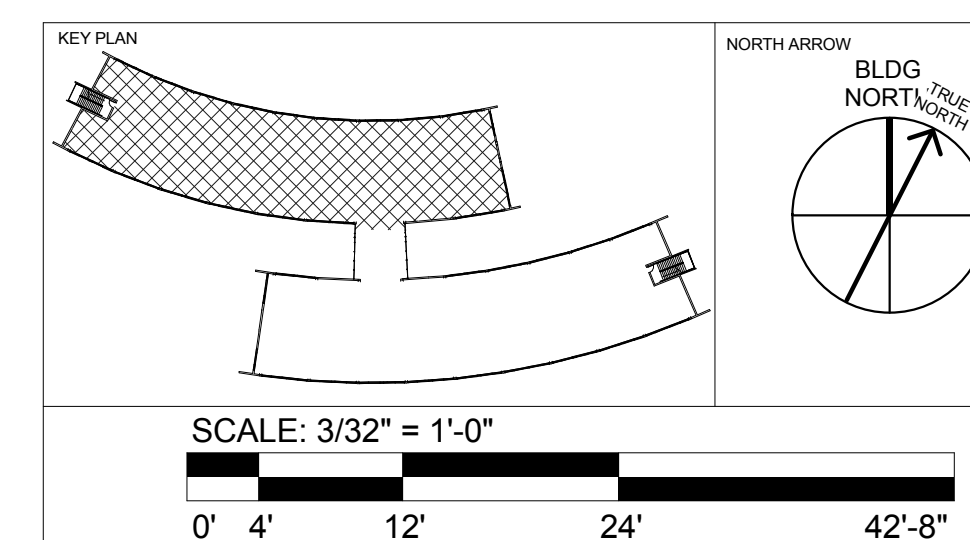
PROJECT STATUS		
PRELIMINARY - NOT FOR CONSTRUCTION		
ISSUE	DATE	DESCRIPTION
1	10/20/2008	30% PRICING
2	11/07/2008	30% DESIGN REVISION
3	12/12/2008	60% INTERNAL QA/QC & COST ESTIMATE
4	12/19/2008	60% PRE-FINAL, NASA REVIEW
5	01/19/2009	60% FINAL ISSUE TO NASA
6	02/16/2009	90% QA/QC & COST ESTIMATE
MARK	DATE	DESCRIPTION
DRAWN	G JOHNSON	DATE
DESIGNED	WM+P	DATE
CHECKED	R PRADHAN	DATE
PROJ/MGR		DATE
REQUESTOR		DATE
R&GA		DATE
SAFETY		DATE
SUPERVISOR		DATE
SIZE	D	25307
SCALE		
INDEX		
SHEET		
OF		

 **Ames Research Center**
Moffet Field, California

N232 COLLABORATIVE SUPPORT FACILITY
SECOND FLOOR SLAB PLAN-
SOUTH WING

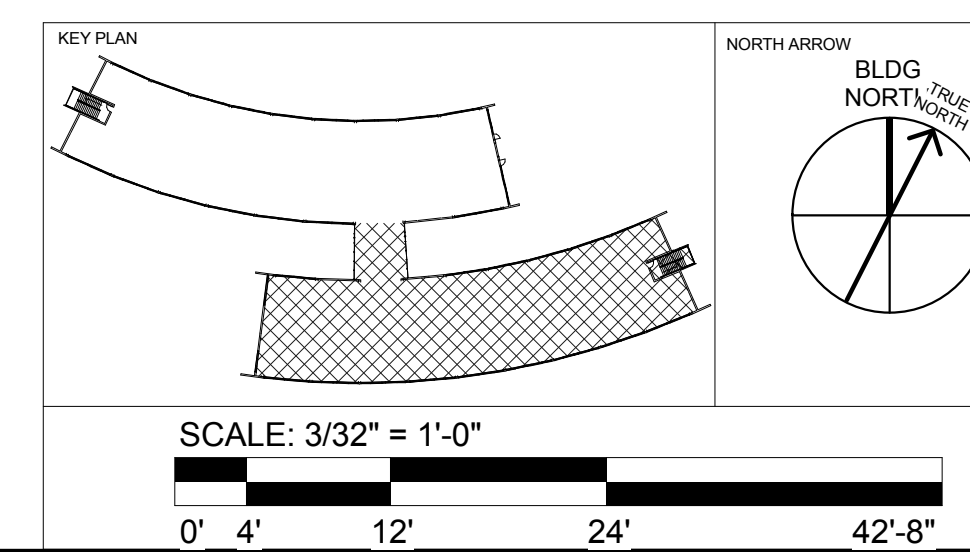
SCALE: 3/32" = 1'-0"
0' 4' 12' 24' 42'-8"

2. CONC HOUSEKEEPING PAD SIZE AND LOCATIONS MUST BE VERIFIED AND COORDINATED WITH MECHANICAL AND ELECTRICAL REQUIREMENTS FOR EQUIPMENT ACTUALLY PROVIDED.



2/16/2009 6:13:48 PM

2. CONC HOUSEKEEPING PAD SIZE AND LOCATIONS MUST BE VERIFIED AND COORDINATED WITH MECHANICAL AND ELECTRICAL REQUIREMENTS FOR EQUIPMENT ACTUALLY PROVIDED.



2/16/2009 6:13:52 PM



CEILING PLAN LEGEND

- RADIANT CEILING PANELS.
- LIGHT SHELF AT WINDOW OPENING
- GYP CEILING
- DOWNLIGHT
- PENDANT
- UTILITY PENDANT
- WALL SCONCE
- EXIT SIGN

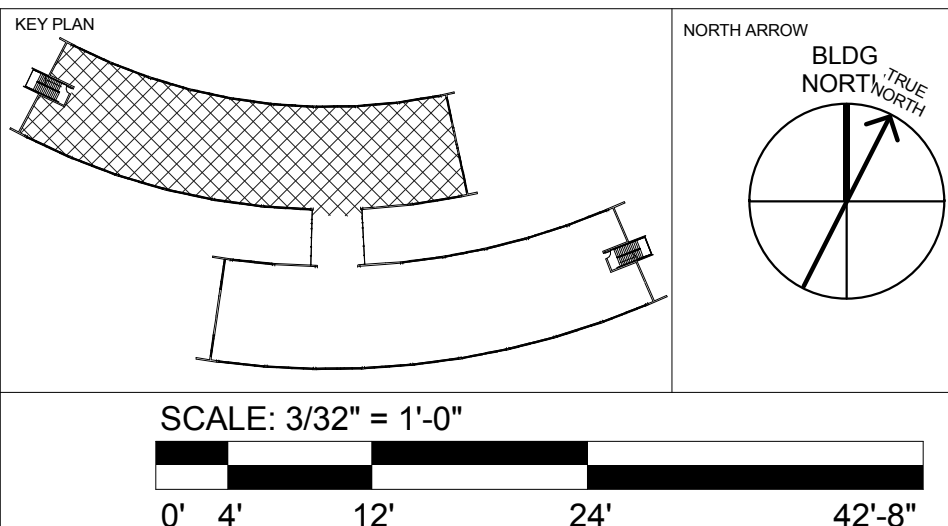
NOTE:
1. SEE ELECTRICAL FOR LIGHTING

PRELIMINARY - NOT FOR CONSTRUCTION

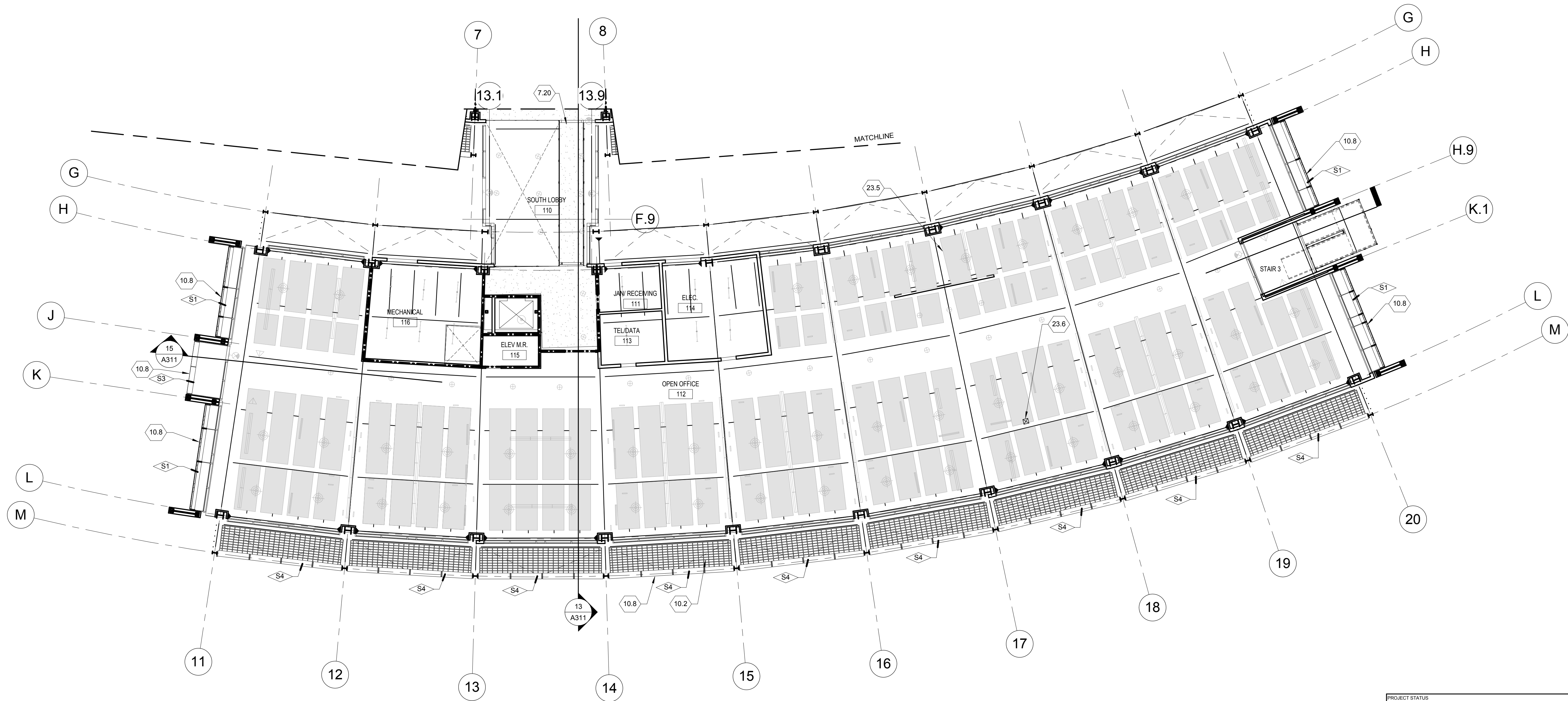
ISSUE	DATE	DESCRIPTION
1	10/20/2008	30% PRICING
2	11/07/2008	30% DESIGN REVISION
3	12/12/2008	60% INTERNAL QA/QC & COST ESTIMATE
4	12/19/2008	60% PRE-FINAL, NASA REVIEW
5	01/19/2009	60% FINAL ISSUE TO NASA
6	02/16/2009	90% QA/QC & COST ESTIMATE

PROJECT STATUS	DATE	DESCRIPTION
DRAWN	G JOHNSON	DATE
DESIGNED	WM + P	DATE
CHECKED	R PRADHAN	DATE
PROJ/MGR		DATE
REQUESTOR		DATE
R&GA		DATE
SAFETY		DATE
SUPERVISOR		DATE

SIZE	CASE CODE	INDEX	SHEET	OF
D	25307	A232-0800-	A241	



SCALE: 3/32" = 1'-0"



CEILING PLAN LEGEND

- RADIANT CEILING PANELS.
- LIGHT SHELF AT WINDOW OPENING
- GYP CEILING
- DOWNLIGHT
- PENDANT
- UTILITY PENDANT
- WALL SCONCE
- EXIT SIGN

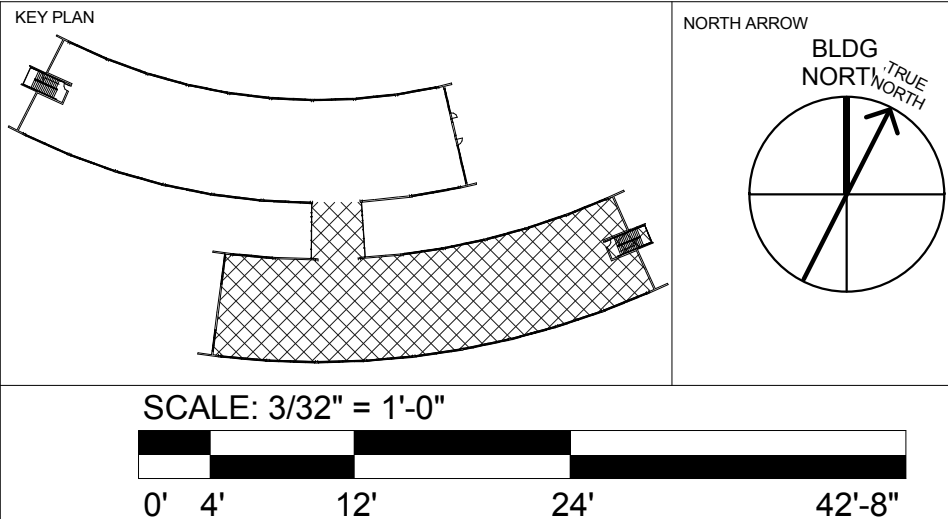
NOTE:
1. SEE ELECTRICAL FOR LIGHTING

PRELIMINARY - NOT FOR CONSTRUCTION

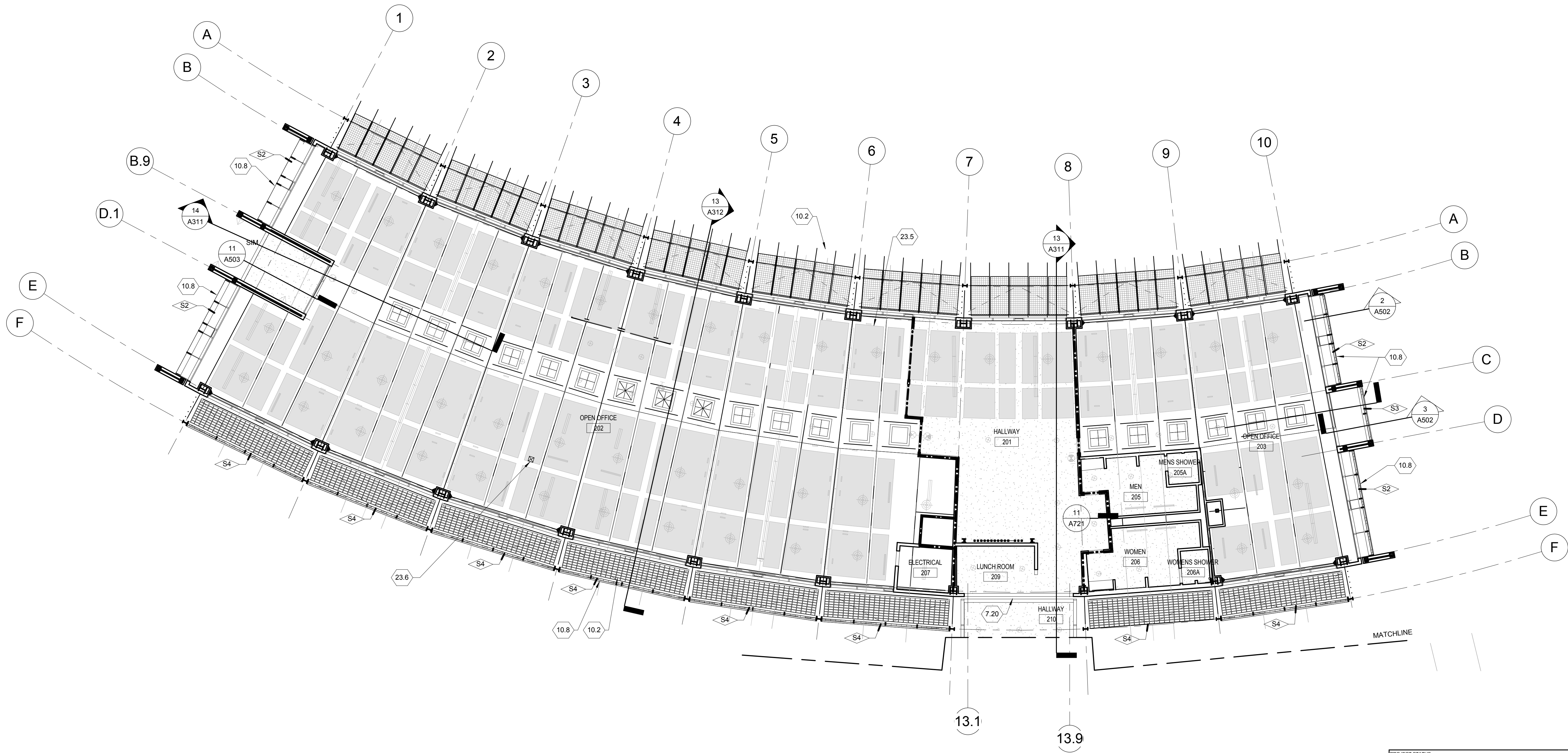
ISSUE	DATE	DESCRIPTION
1	10/20/2008	30% PRICING
2	11/07/2008	30% DESIGN REVISION
3	12/12/2008	60% INTERNAL QA/QC & COST ESTIMATE
4	12/19/2008	60% PRE-FINAL, NASA REVIEW
5	01/19/2009	60% FINAL ISSUE TO NASA
6	02/16/2009	90% QA/QC & COST ESTIMATE

DRAWN	G JOHNSON	DATE	
DESIGNED	WMHP	DATE	
CHECKED	R PRADHAN	DATE	
PROJ/MGR		DATE	
REQUESTOR		DATE	
RFQA		DATE	
SAFETY		DATE	
SUPERVISOR		DATE	

SIZE	CASE CODE	INDEX	SHEET	OF
D	25307	A232-0800-	A242	



2/16/2009 6:14:05 PM



CEILING PLAN LEGEND

- RADIANT CEILING PANELS.
- LIGHT SHELF AT WINDOW OPENING
- GYP CEILING
- DOWNLIGHT
- PENDANT
- UTILITY PENDANT
- WALL SCONCE
- EXIT SIGN

NOTE:
1. SEE ELECTRICAL FOR LIGHTING

PRELIMINARY - NOT FOR CONSTRUCTION

ISSUE	DATE	DESCRIPTION
1	10/20/2008	30% PRICING
2	11/07/2008	30% DESIGN REVISION
3	12/12/2008	60% INTERNAL QA/QC & COST ESTIMATE
4	12/19/2008	60% PRE-FINAL, NASA REVIEW
5	01/19/2009	60% FINAL ISSUE TO NASA
6	02/16/2009	90% QA/QC & COST ESTIMATE

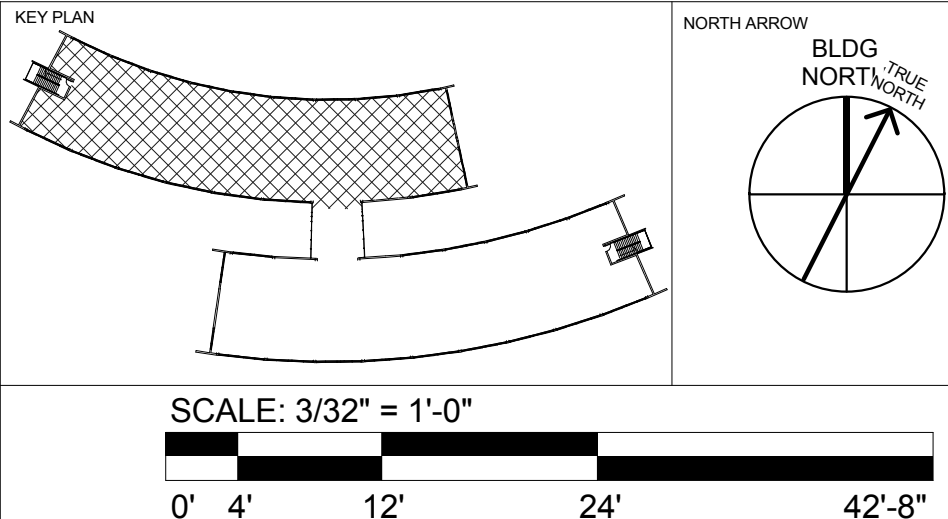
MARK	DATE	DESCRIPTION
DRAWN	G JOHNSON	DATE
DESIGNED	WM + P	DATE
CHECKED	R PRADHAN	DATE
PROJ/MGR		DATE
REQUESTOR		DATE
RFQA		DATE
SAFETY		DATE
SUPERVISOR		DATE

SIZE	CASE CODE	INDEX	SHEET	OF
D	25307	A232-0800-	A251	

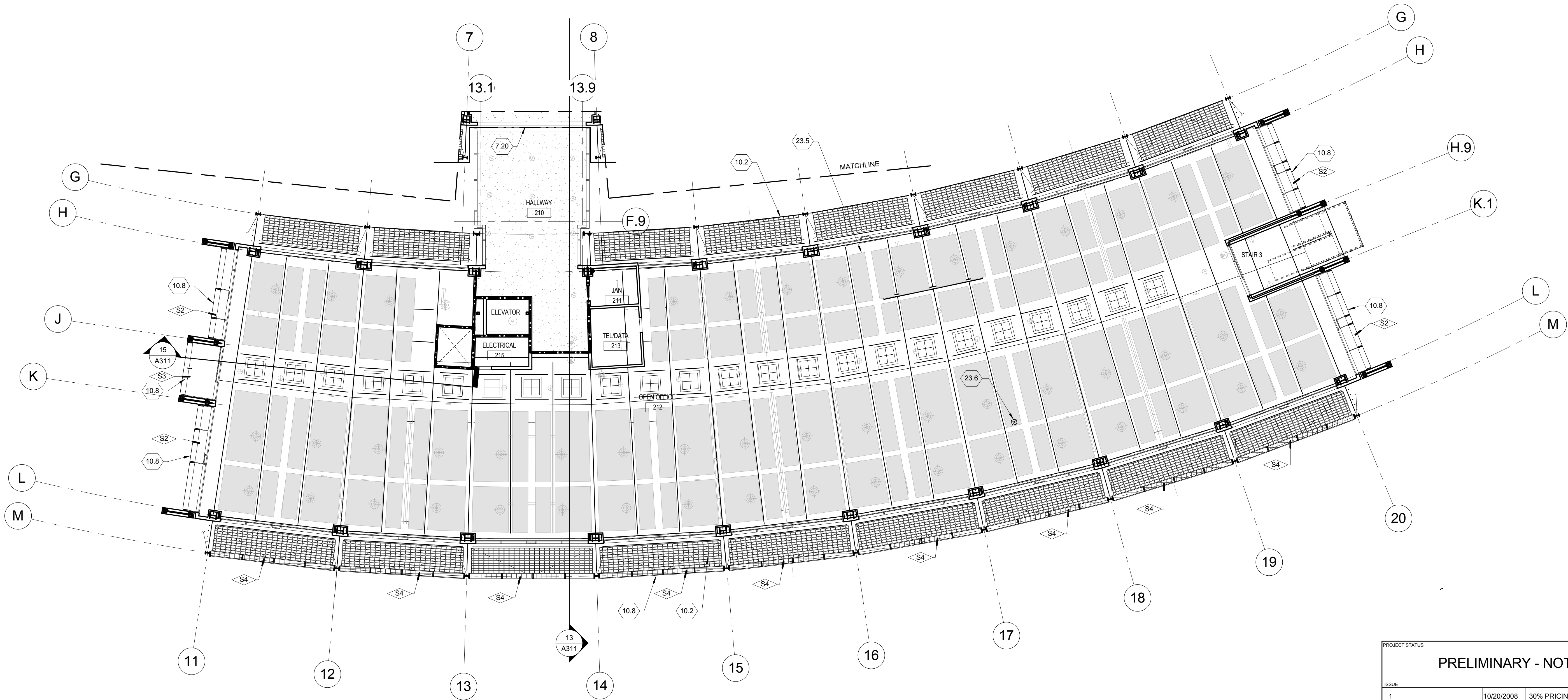
 Ames Research Center
Moffet Field, California

N232 COLLABORATIVE SUPPORT FACILITY

SECOND FLOOR REFLECTED CEILING PLAN - NORTH WING



2/16/2009 6:14:10 PM

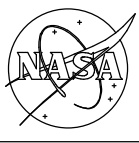


CEILING PLAN LEGEND

- RADIANT CEILING PANELS.
 - LIGHT SHELF AT WINDOW OPENING
 - GYP CEILING
 - DOWNLIGHT
 - PENDANT
 - UTILITY PENDANT
 - WALL SCONCE
 - EXIT SIGN
- NOTE:
1. SEE ELECTRICAL FOR LIGHTING

PRELIMINARY - NOT FOR CONSTRUCTION

PROJECT STATUS		
ISSUE	DATE	DESCRIPTION
1	10/20/2008	30% PRICING
2	11/07/2008	30% DESIGN REVISION
3	12/12/2008	60% INTERNAL QA/QC & COST ESTIMATE
4	12/19/2008	60% PRE-FINAL, NASA REVIEW
5	01/19/2009	60% FINAL ISSUE TO NASA
6	02/16/2009	90% QA/QC & COST ESTIMATE
MARK	DATE	DESCRIPTION
DRAWN	G JOHNSON	DATE
DESIGNED	WMHP	DATE
CHECKED	R PRADHAN	DATE
PROJ/MGR		DATE
REQUESTOR		DATE
R&GA		DATE
SAFETY		DATE
SUPERVISOR		DATE
SIZE	DATE CODE	DATE
D	25307	A232-0800-
SCALE	INDEX	SHEET OF



Ames Research Center
Moffet Field, California

N232 COLLABORATIVE SUPPORT FACILITY

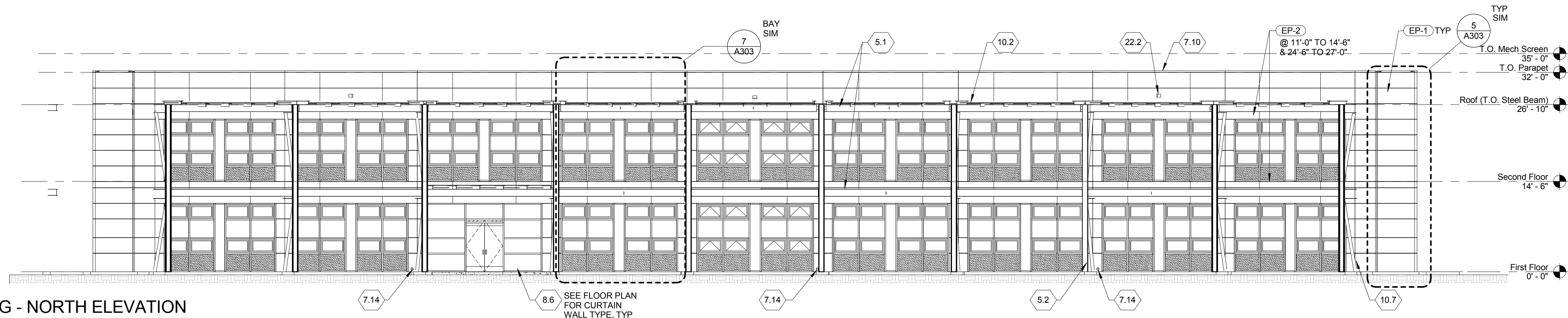
SECOND FLOOR REFLECTED CEILING PLAN - SOUTH WING

A252

2/16/2009 6:14:19 PM

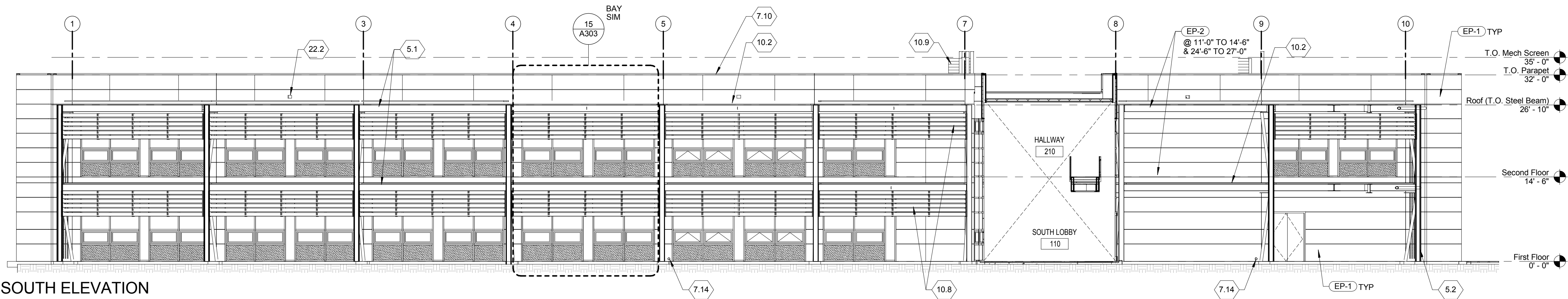
15 NORTH WING - NORTH ELEVATION
(FLATTENED VIEW)

A301 REF: A202 SCALE: 3/32" = 1'-0"

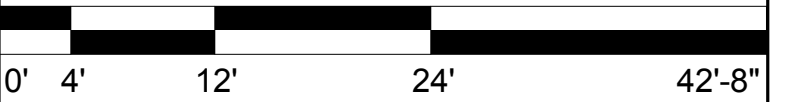


14 NORTH WING - SOUTH ELEVATION
(FLATTENED VIEW)

A301 REF: A107 SCALE: 3/32" = 1'-0"

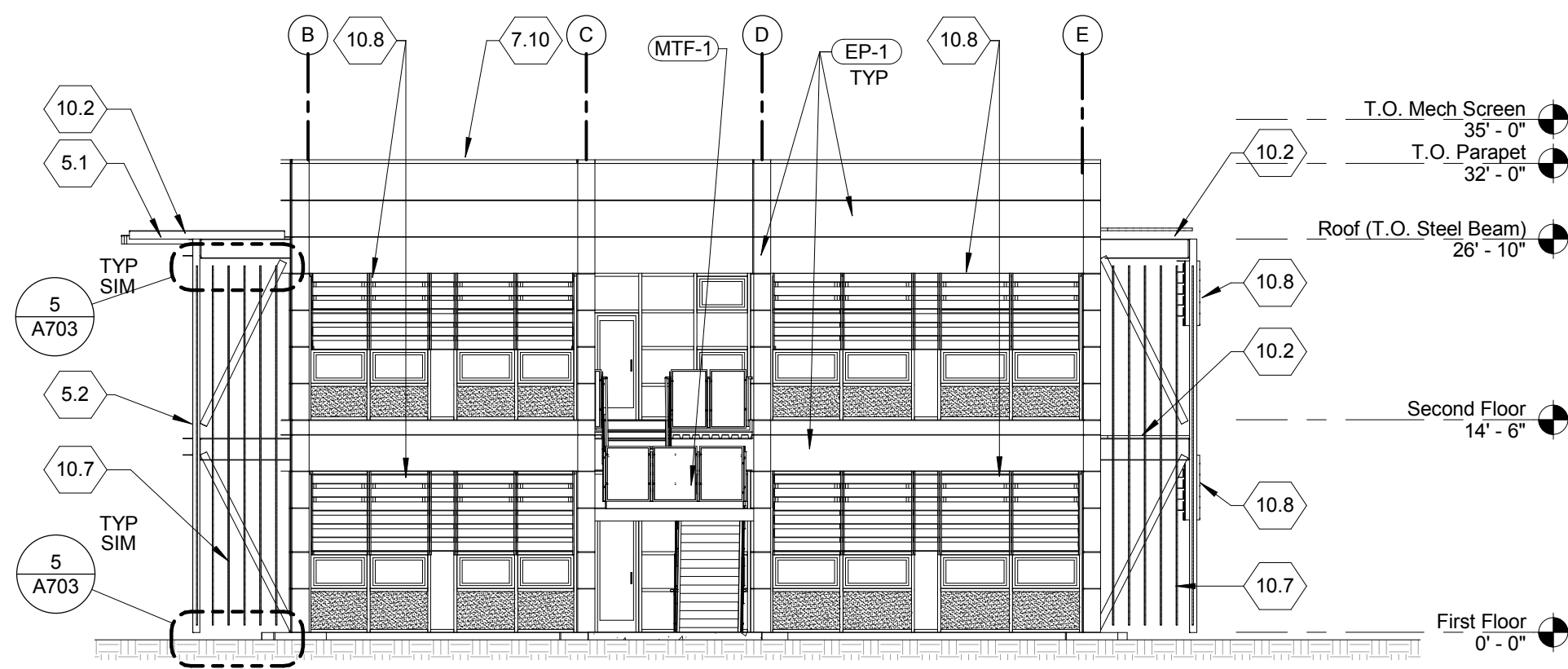


SCALE: 3/32" = 1'-0"



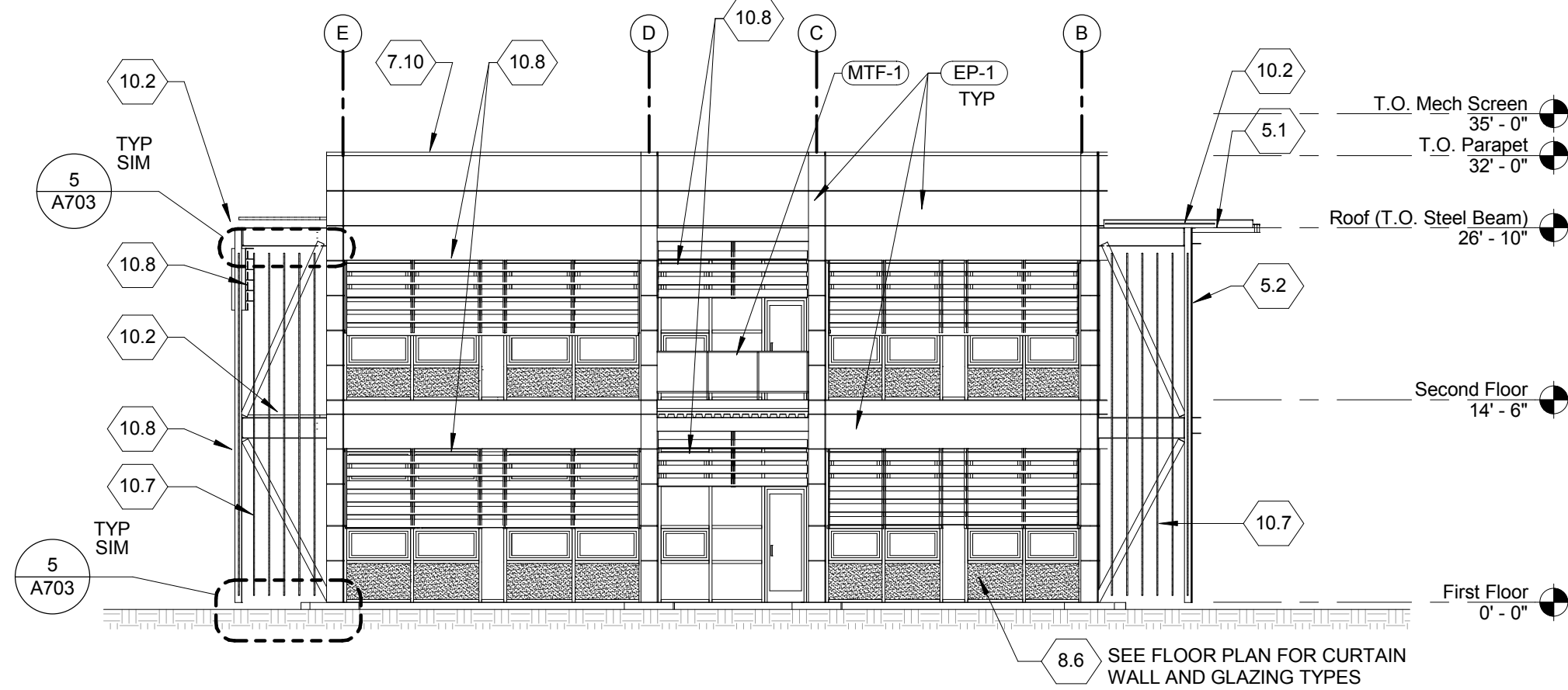
13 NORTH WING- WEST ELEVATION

A301 REF: A202 SCALE: 3/32" = 1'-0"



5 NORTH WING - EAST ELEVATION

A301 REF: A202 SCALE: 3/32" = 1'-0"



PROJECT STATUS		
PRELIMINARY - NOT FOR CONSTRUCTION		
ISSUE	DATE	DESCRIPTION
1	10/20/2008	30% PRICING
2	11/07/2008	30% DESIGN REVISION
3	12/12/2008	60% INTERNAL QA/QC & COST ESTIMATE
4	12/19/2008	60% PRE-FINAL, NASA REVIEW
5	01/19/2009	60% FINAL ISSUE TO NASA
6	02/16/2009	90% QAQC & COST ESTIMATE
MARK	DATE	DESCRIPTION
DRAWN	G JOHNSON	DATE
DESIGNED	WM + P	DATE
CHECKED	R PRADHAN	DATE
PROJ/MGR		DATE
REQUESTOR		DATE
R&GA		DATE
SAFETY		DATE
SUPERVISOR		DATE
SIZE	CASE CODE	REV
D	25307	A301
SCALE	INDEX	SHEET OF

Ames Research Center
Moffet Field, California

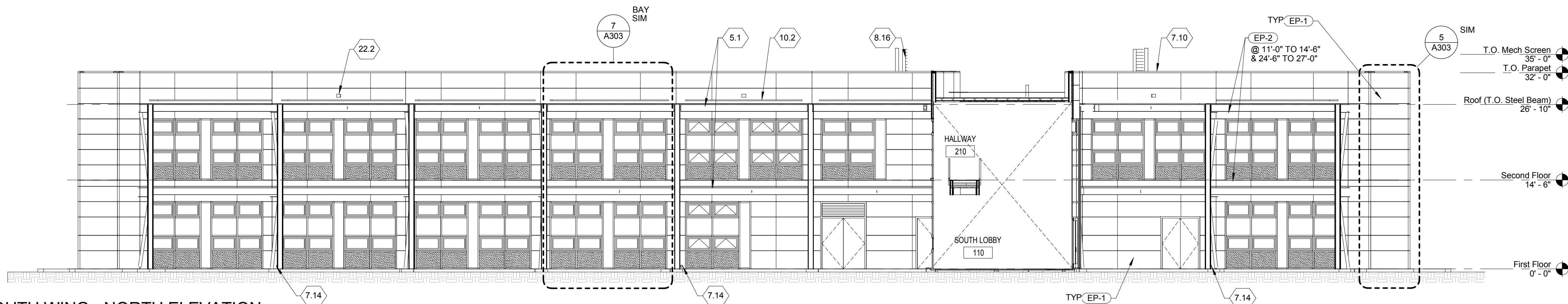
N232 COLLABORATIVE SUPPORT FACILITY

EXTERIOR ELEVATIONS - NORTH WING

2/16/2009 6:14:28 PM

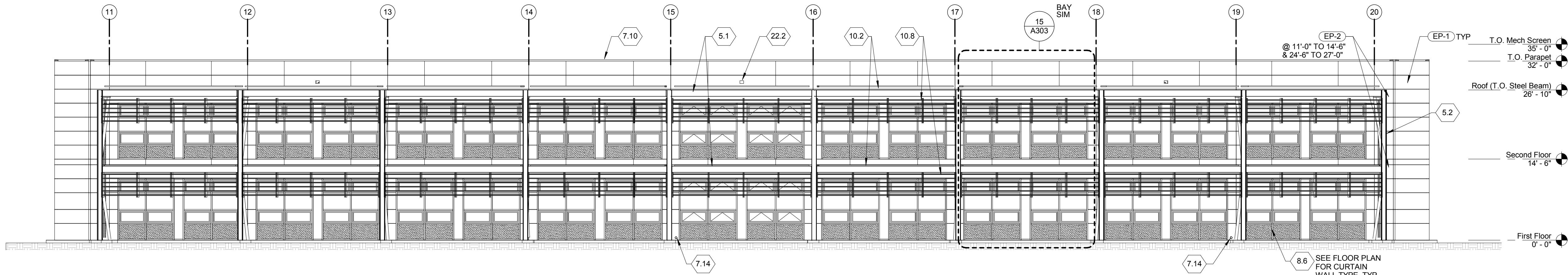
15 SOUTH WING - NORTH ELEVATION
(FLATTENED VIEW)

A302 REF: A202 SCALE: 3/32" = 1'-0"



14 SOUTH WING- SOUTH ELEVATION
(FLATTENED VIEW)

A302 REF: A202 SCALE: 3/32" = 1'-0"

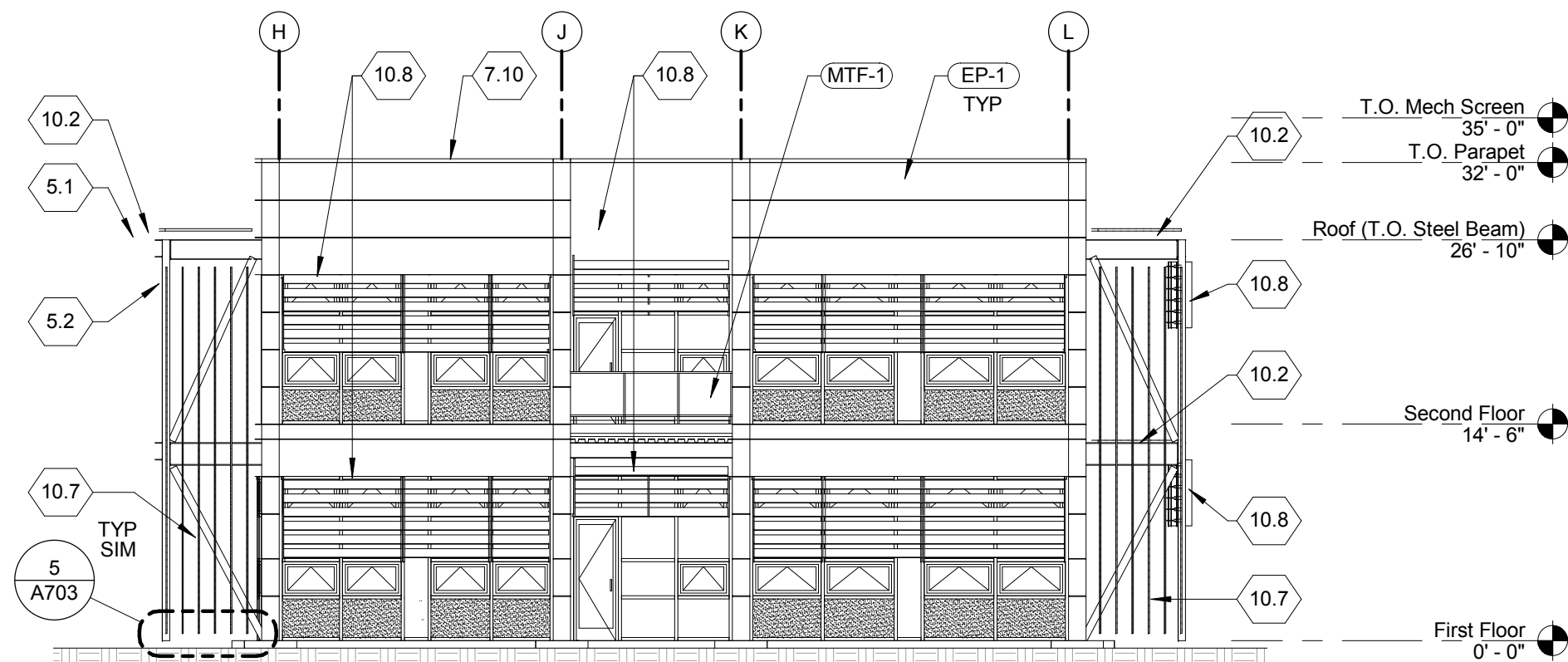


SCALE: 3/32" = 1'-0"

0' 4' 12' 24' 42'-8"

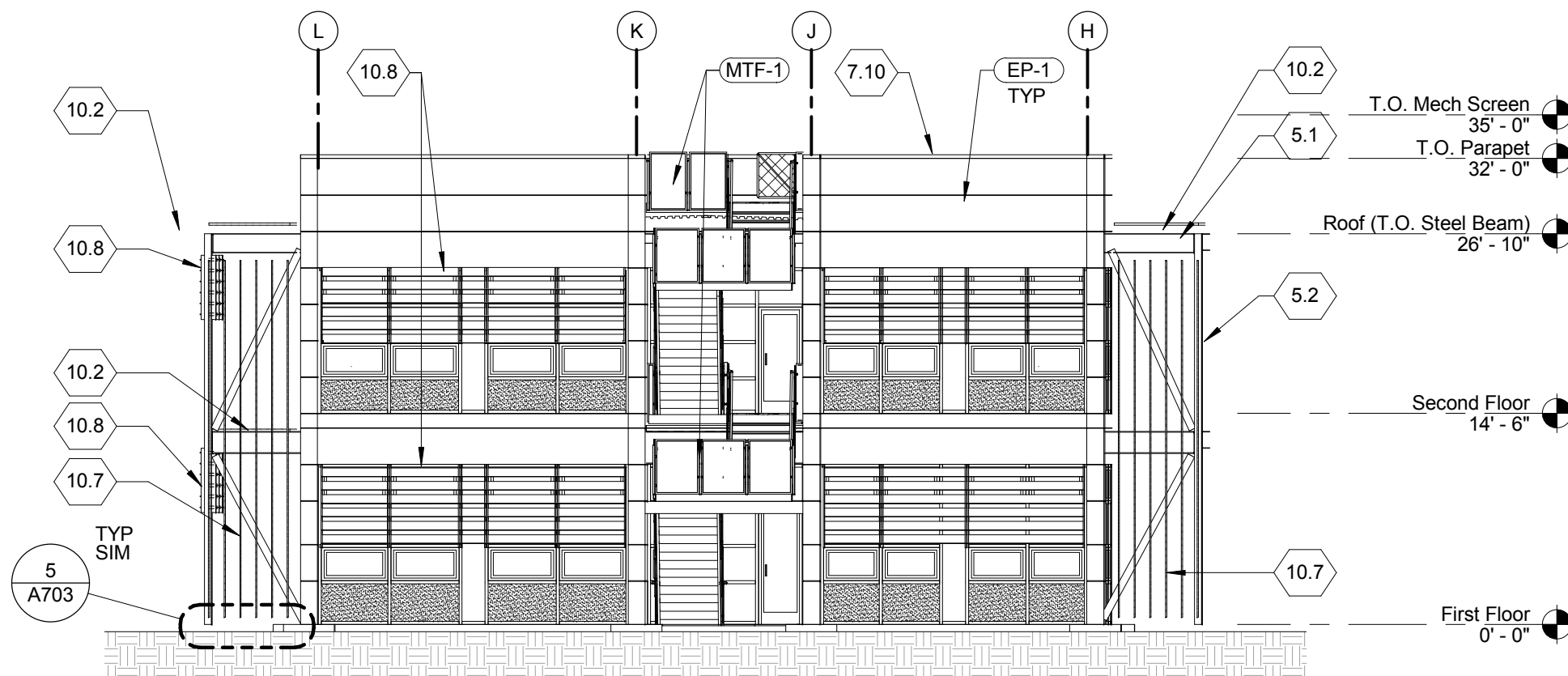
13 SOUTH WING - WEST ELEVATION

A302 REF: A202 SCALE: 3/32" = 1'-0"



5 SOUTH WING - EAST ELEVATION

A302 REF: A202 SCALE: 3/32" = 1'-0"



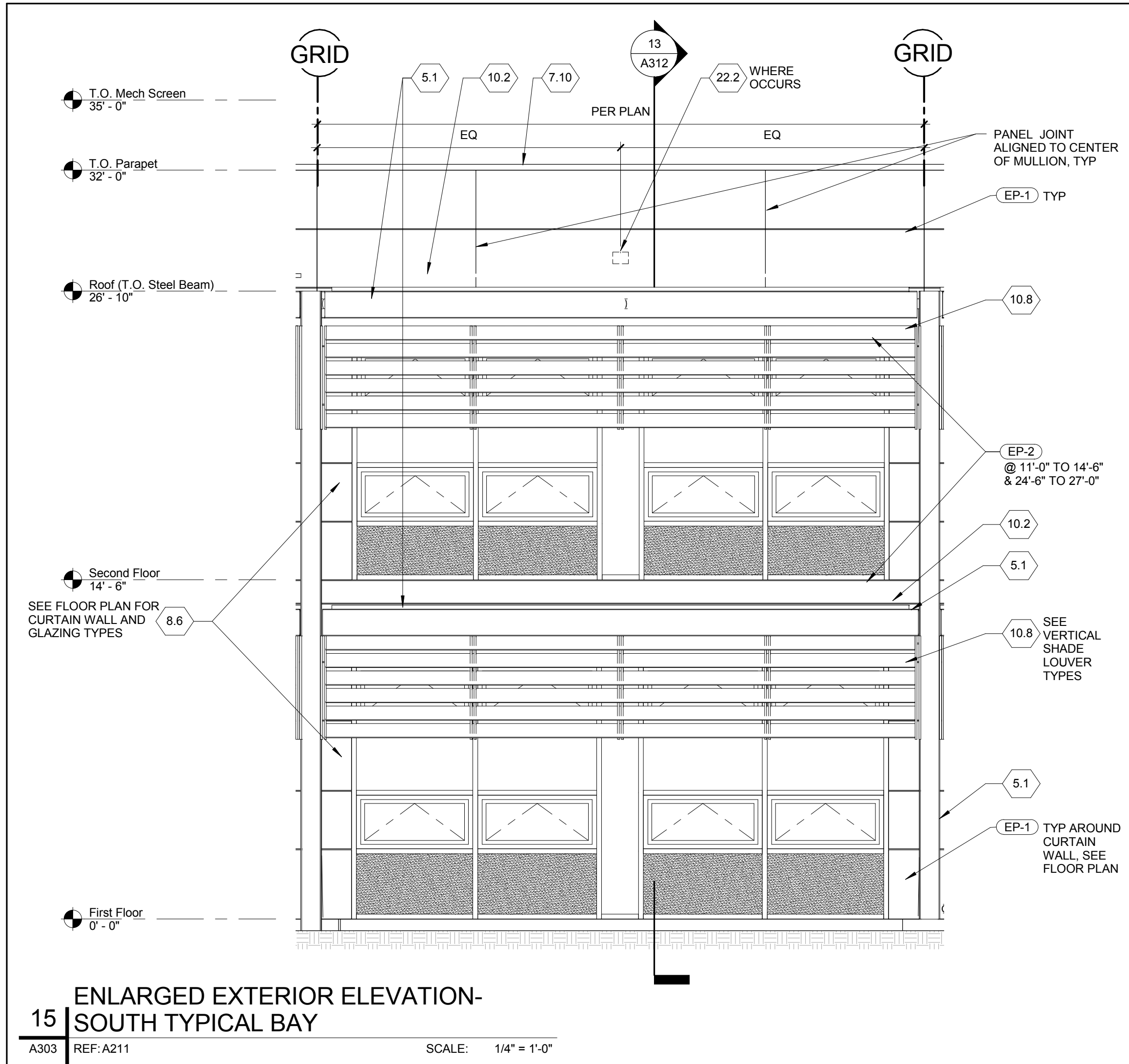
PROJECT STATUS			PRELIMINARY - NOT FOR CONSTRUCTION			
ISSUE	DATE	DESCRIPTION				
1	10/20/2008	30% PRICING				
2	11/07/2008	30% DESIGN REVISION				
3	12/12/2008	60% INTERNAL QA/QC & COST ESTIMATE				
4	12/19/2008	60% PRE-FINAL, NASA REVIEW				
5	01/19/2009	60% FINAL ISSUE TO NASA				
6	02/16/2009	90% QA/QC & COST ESTIMATE				
MARK	DATE	DESCRIPTION				
DRAWN	G JOHNSON	DATE				
DESIGNED	W + P	DATE				
CHECKED	R PRADHAN	DATE				
PROJ/MGR		DATE				
REQUESTOR		DATE				
R&GA		DATE				
SAFETY		DATE				
SUPERVISOR		DATE				
			SIZE	CASE CODE	A232-0800-	REV
			D	25307	A302	
			SCALE	INDEX	SHEET	OF

 **Ames Research Center**
Moffet Field, California

N232 COLLABORATIVE SUPPORT FACILITY

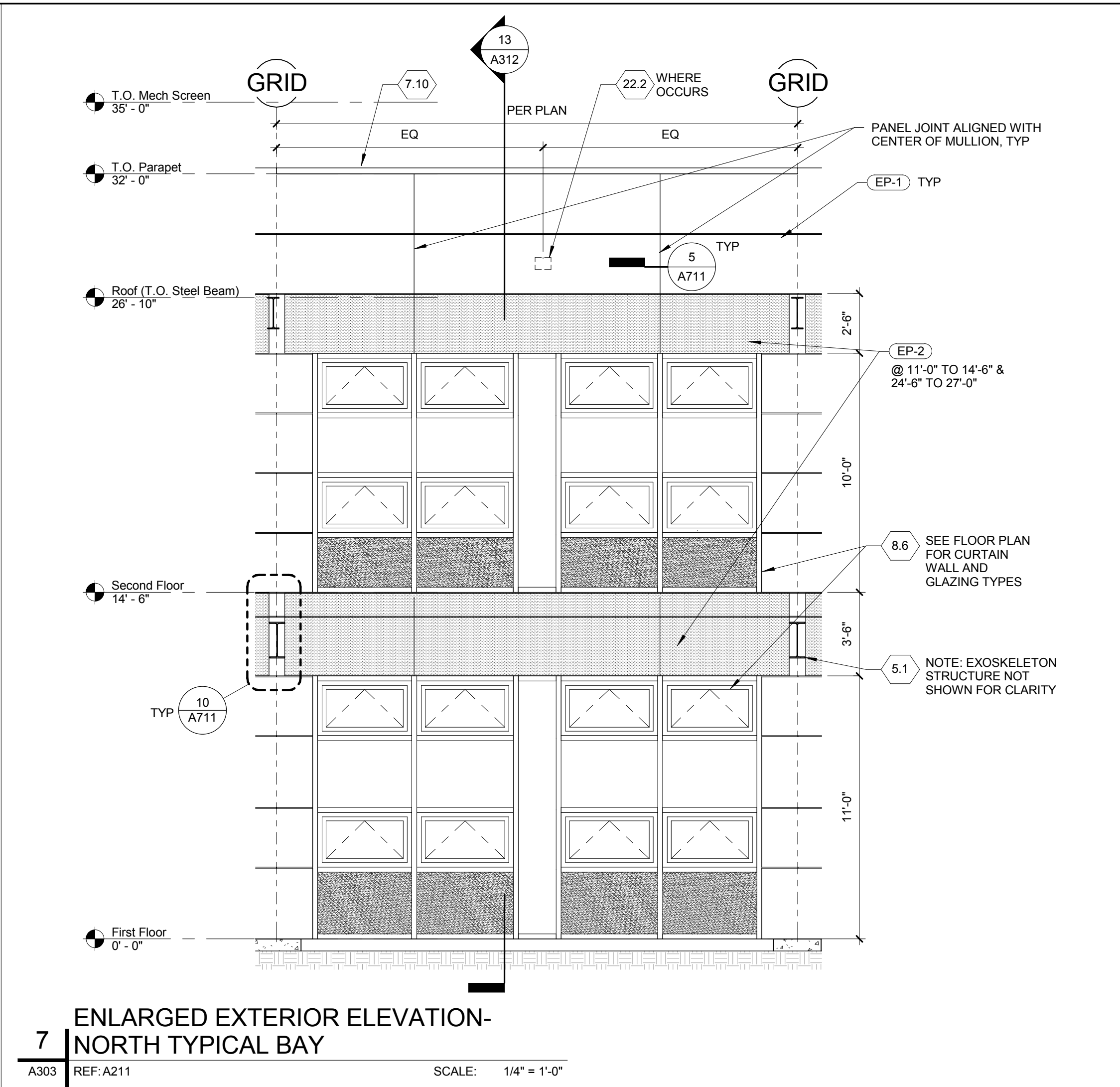
EXTERIOR ELEVATIONS - SOUTH WING

2/16/2009 6:14:34 PM



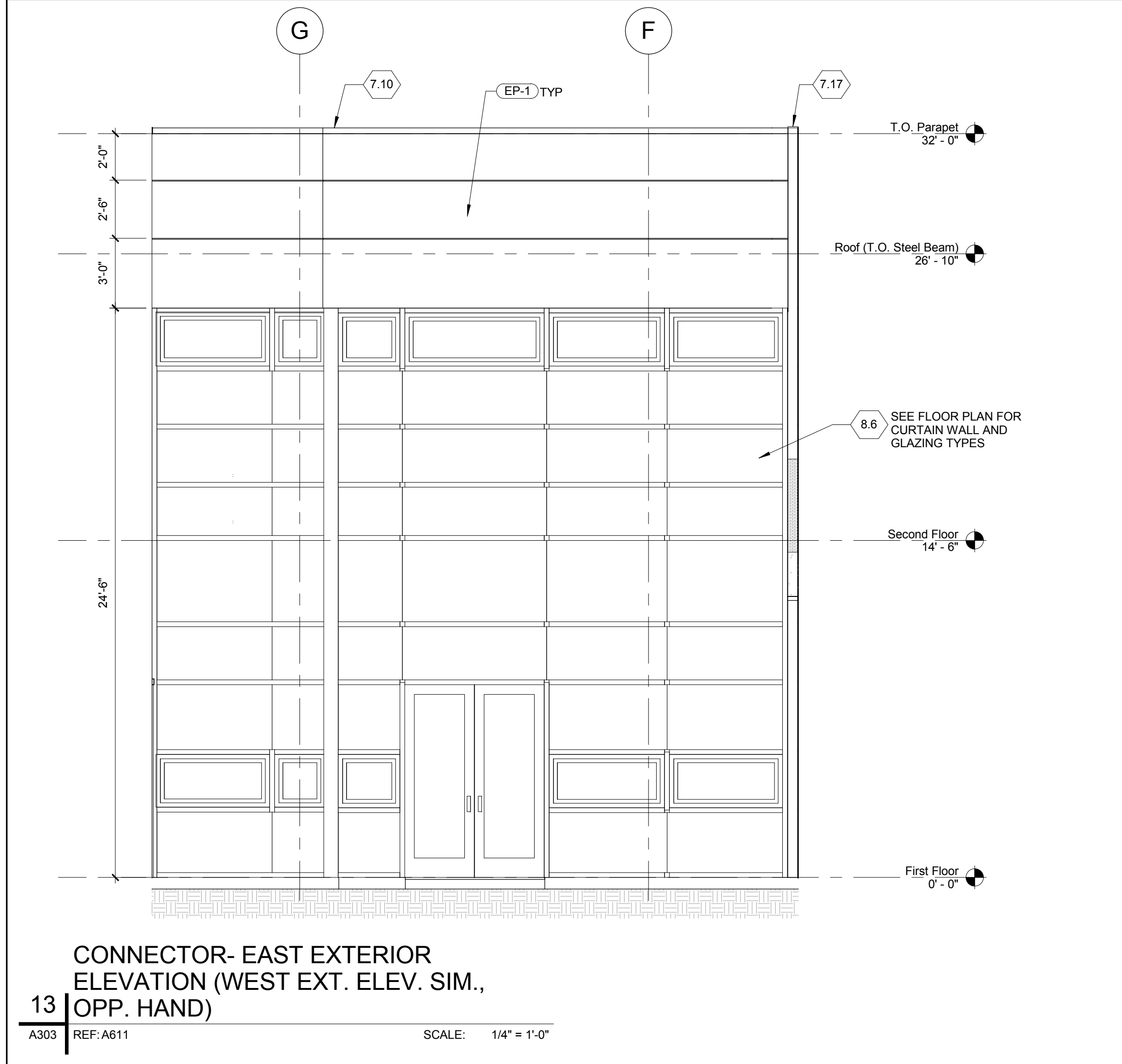
15 ENLARGED EXTERIOR ELEVATION-
SOUTH TYPICAL BAY

A303 REF: A211 SCALE: 1/4" = 1'-0"



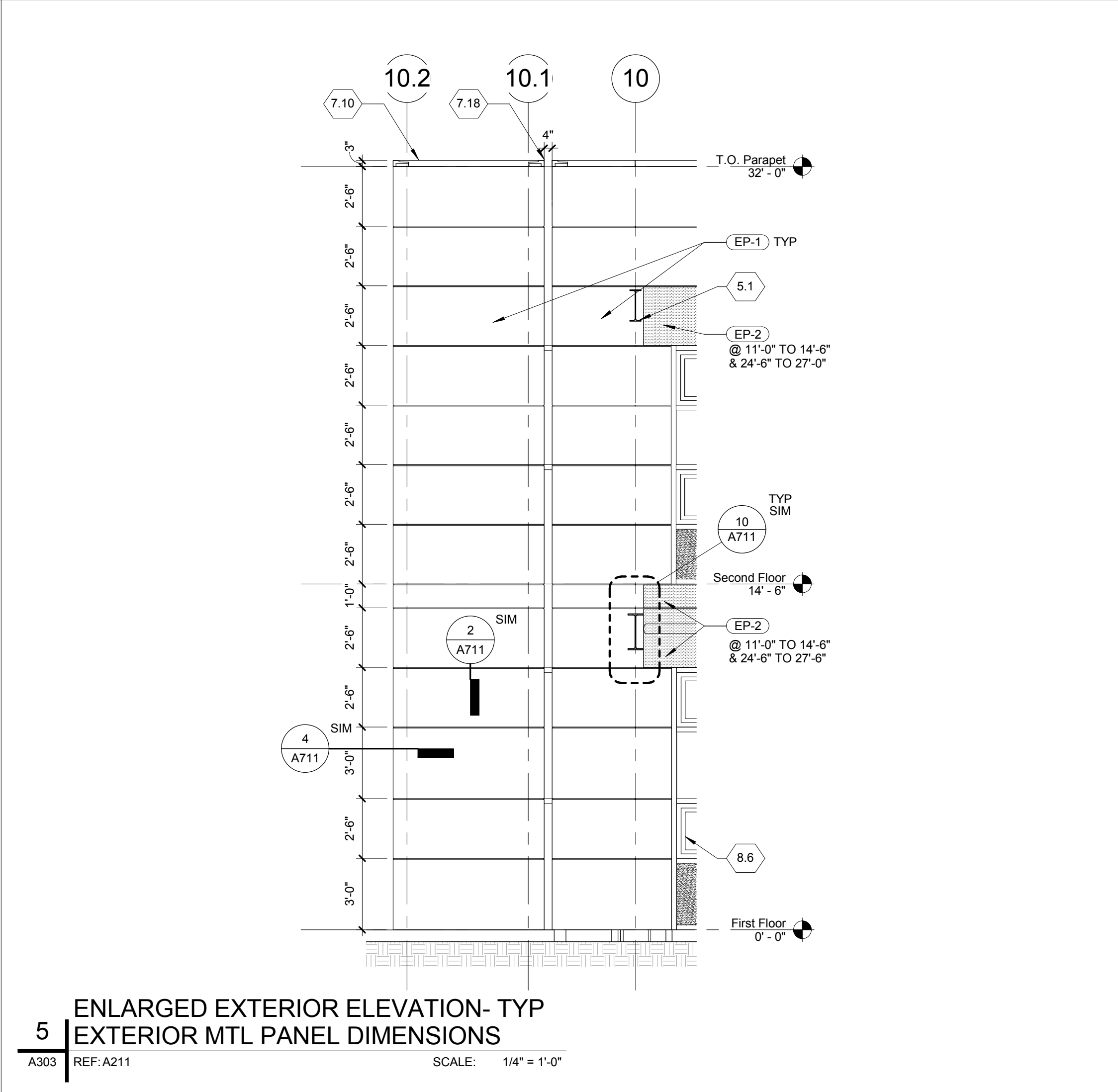
7 ENLARGED EXTERIOR ELEVATION-
NORTH TYPICAL BAY

A303 REF: A211 SCALE: 1/4" = 1'-0"



13 CONNECTOR- EAST EXTERIOR
ELEVATION (WEST EXT. ELEV. SIM.,
OPP. HAND)

A303 REF: A611 SCALE: 1/4" = 1'-0"



5 ENLARGED EXTERIOR ELEVATION- TYP
EXTERIOR MTL PANEL DIMENSIONS

A303 REF: A211 SCALE: 1/4" = 1'-0"

- NOTES:
1. SEE SHEET A104 FOR EXTERIOR FINISH/COLOR LEGEND
 2. SEE DOOR AND CURTAIN WALL SCHEDULE FOR MATERIALS AND COLORS
 3. SEE SHEET A001 FOR MATERIAL KEYNOTES
 4. SEE FLOOR PLANS FOR CURTAIN WALL TYPES AND GLAZING TYPES



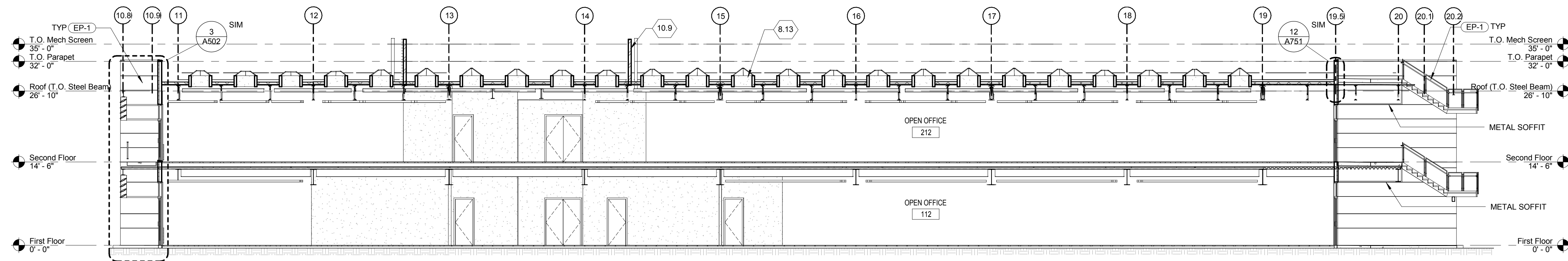
PROJECT STATUS		
PRELIMINARY - NOT FOR CONSTRUCTION		
ISSUE	DATE	DESCRIPTION
1	10/20/2008	30% PRICING
2	11/07/2008	30% DESIGN REVISION
3	12/12/2008	60% INTERNAL QA/QC & COST ESTIMATE
4	12/19/2008	60% PRE-FINAL, NASA REVIEW
5	01/19/2009	60% FINAL ISSUE TO NASA
6	02/16/2009	90% QAQC & COST ESTIMATE
MARK	DATE	DESCRIPTION
DRAWN	G JOHNSON	DATE
DESIGNED	WM+P	DATE
CHECKED	R PRADHAN	DATE
PROJ/MGR		DATE
REQUESTOR		DATE
R&GA		DATE
SAFETY		DATE
SUPERVISOR		DATE
SIZE	CASE CODE	PROJECT CODE
D	25307	A232-0800-
SCALE	INDEX	SHEET
		OF

 **Ames Research Center**
Moffet Field, California

N232 COLLABORATIVE SUPPORT FACILITY

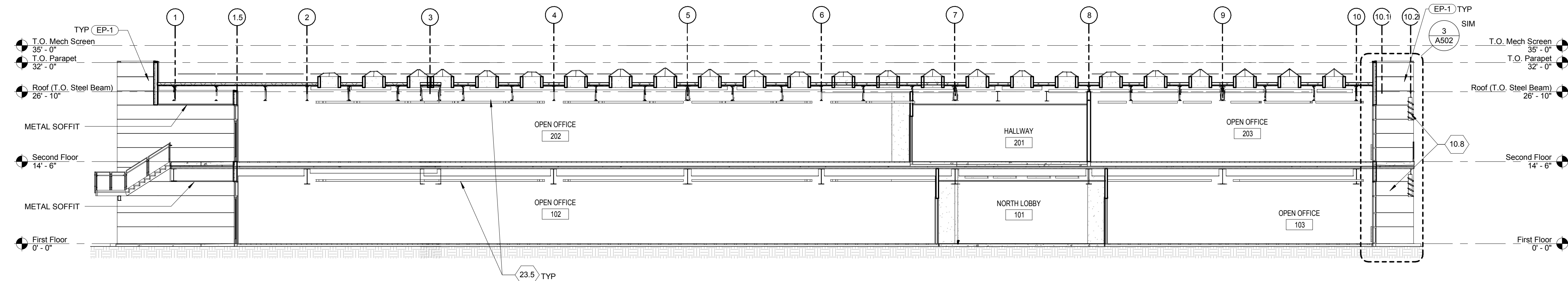
**ENLARGED EXTERIOR
ELEVATIONS**

A303



15 LONGITUDINAL SECTION- SOUTH WING
(FLATTENED VIEW)

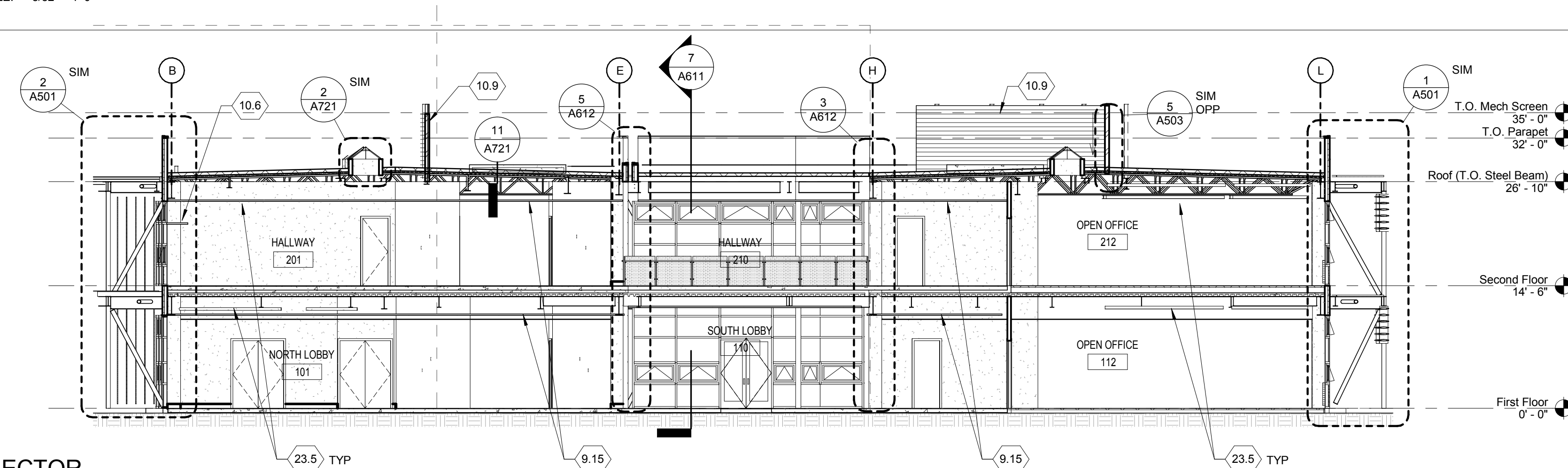
A311 REF: A212 SCALE: 3/32" = 1'-0"



14 LONGITUDINAL SECTION- NORTH WING
(FLATTENED VIEW)


A311 REF: A211 SCALE: 3/32" = 1'-0"

SCALE: 3/32" = 1'-0"



13 TRANSVERSE SECTION @ CONNECTOR
- EAST

A311 REF: A202 SCALE: 3/32" = 1'-0"

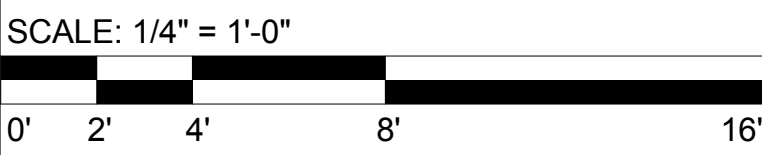
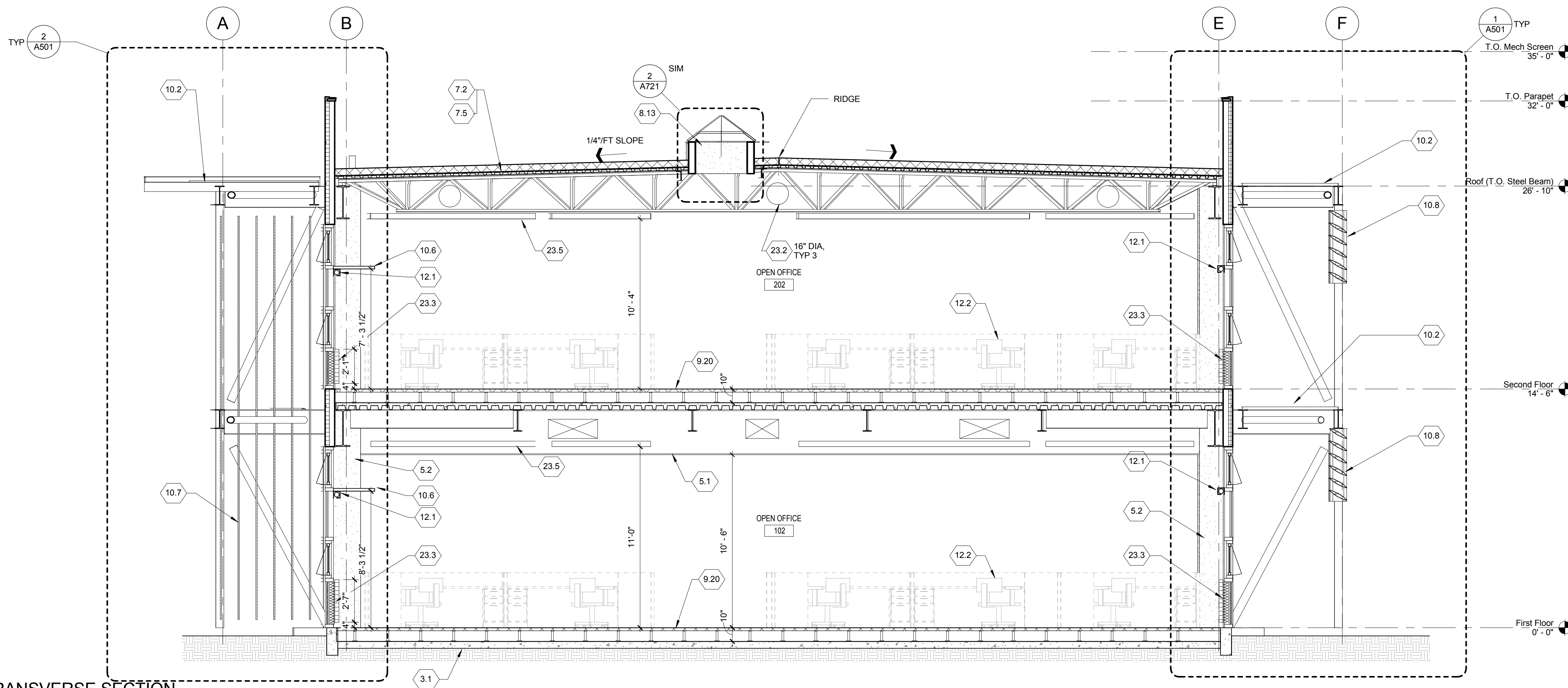
PROJECT STATUS				
PRELIMINARY - NOT FOR CONSTRUCTION				
ISSUE				
1	10/20/2008	30% PRICING		
2	11/07/2008	30% DESIGN REVISION		
3	12/12/2008	60% INTERNAL QA/QC & COST ESTIMATE		
4	12/19/2008	60% PRE-FINAL, NASA REVIEW		
5	01/19/2009	60% FINAL ISSUE TO NASA		
6	02/16/2009	90% QA/QC & COST ESTIMATE		
MARK	DATE	DESCRIPTION		
DRAWN	G JOHNSON	DATE		
DESIGNED	WM + P	DATE		
CHECKED	R PRADHAN	DATE		
PROJ/MGR		DATE		
REQUESTOR		DATE		
R&GA		DATE		
SAFETY		DATE		
SUPERVISOR		DATE		
<div><div></div><div><div>Ames Research Center</div><div>Moffet Field, California</div></div></div>				
N232 COLLABORATIVE SUPPORT FACILITY				
BUILDING SECTIONS				
SIZE	CAGE CODE	A232-0800-	A311	REV
D	25307			
SCALE	INDEX	SHEET	OF	

2/16/2009 6:14:48 PM

13 TYPICAL TRANSVERSE SECTION

A312 REF: A202

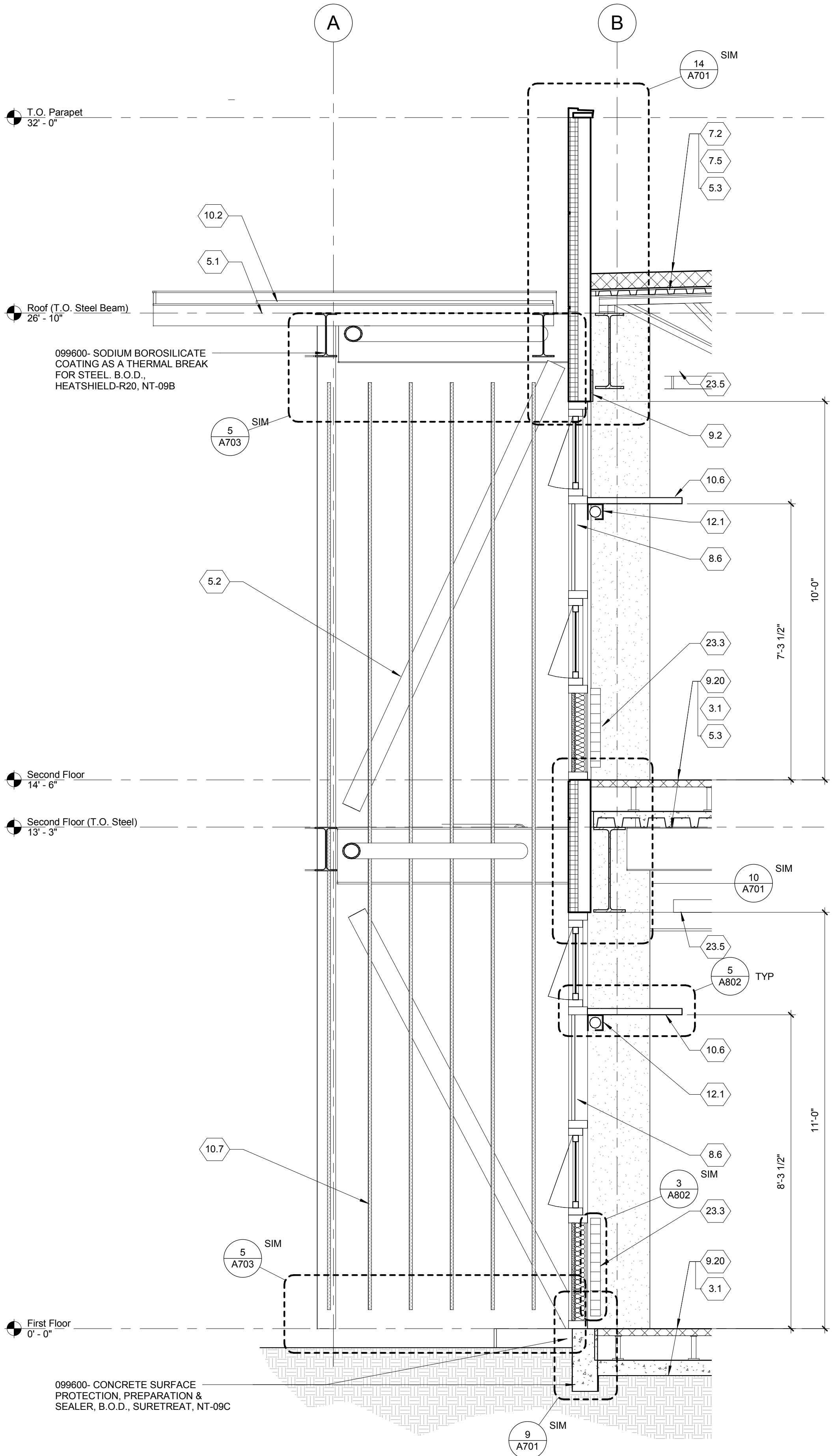
SCALE: 1/4" = 1'-0"



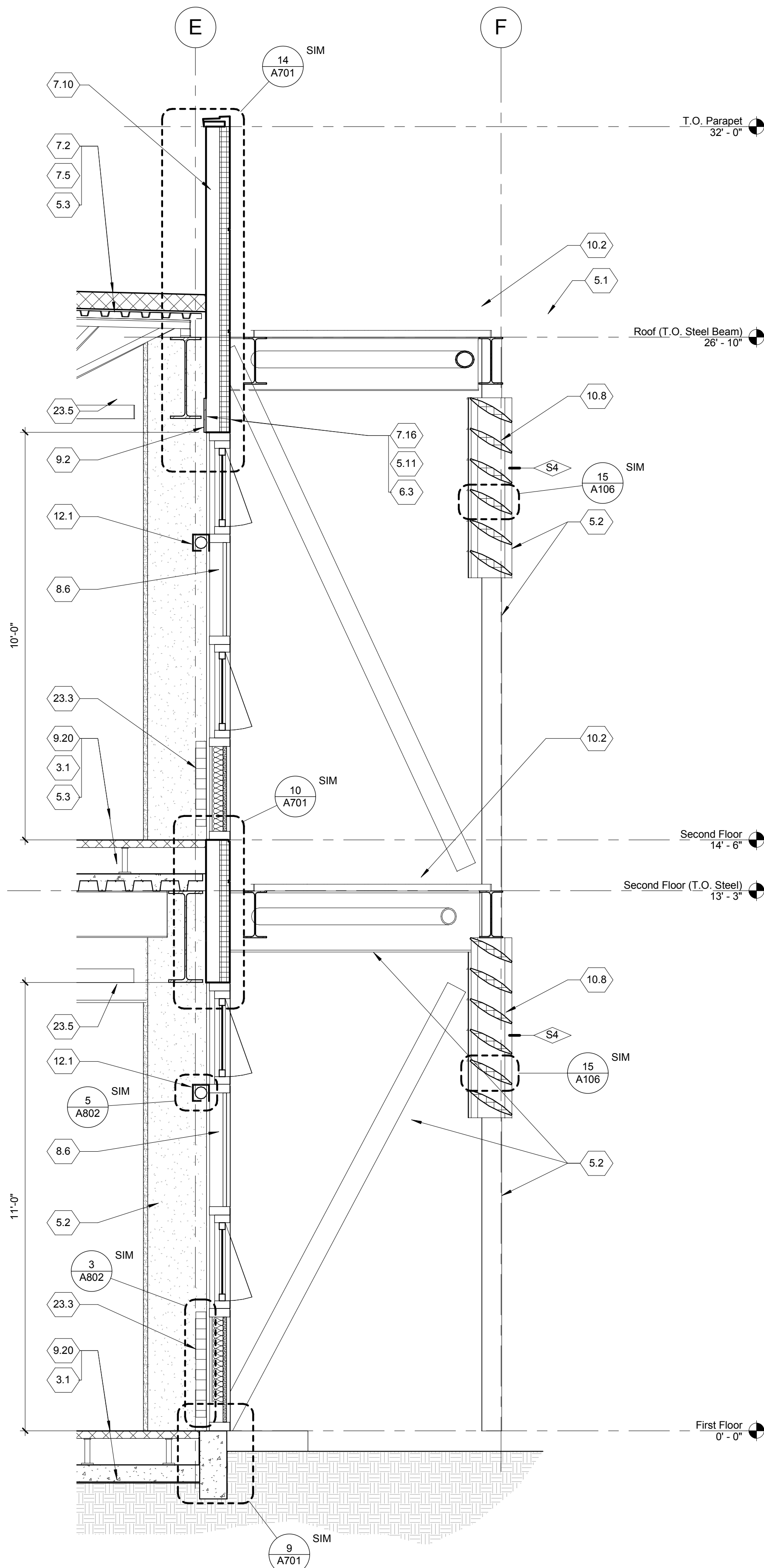
PROJECT STATUS		
PRELIMINARY - NOT FOR CONSTRUCTION		
ISSUE	DATE	DESCRIPTION
1	10/20/2008	30% PRICING
2	11/07/2008	30% DESIGN REVISION
3	12/12/2008	60% INTERNAL QA/QC & COST ESTIMATE
4	12/19/2008	60% PRE-FINAL, NASA REVIEW
5	01/19/2009	60% FINAL ISSUE TO NASA
6	02/16/2009	90% QA/QC & COST ESTIMATE
MARK	DATE	DESCRIPTION
DRAWN	G JOHNSON	
DESIGNED	WM+P	
CHECKED	R PRADHAN	
PROJ/MGR		
REQUESTOR		
R&GA		
SAFETY		
SUPERVISOR		
<div><div></div><div>Ames Research Center Moffet Field, California</div></div> <div>N232 COLLABORATIVE SUPPORT FACILITY</div> <div>BUILDING SECTIONS</div>		
SIZE	CASE CODE	INDEX
D	25307	A232-0800-
SCALE	INDEX	SHEET
		OF

2/16/2009 6:14:50 PM

2 NORTH EXTERIOR WALL SECTION
A501 REF: A311 SCALE: 1/2" = 1'-0"

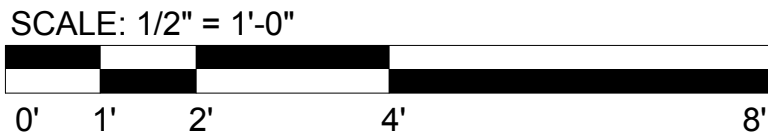


1 SOUTH EXTERIOR WALL SECTION
A501 REF: A311 SCALE: 1/2" = 1'-0"

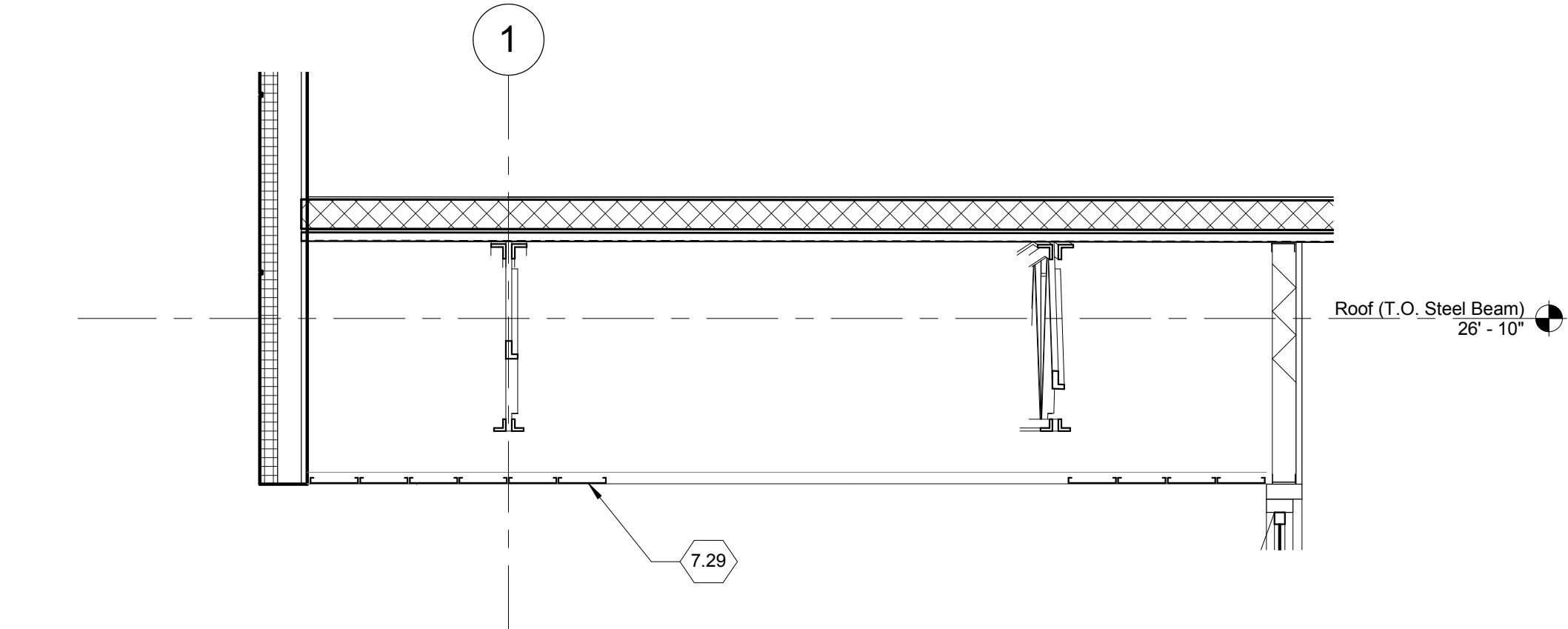


MATERIAL KEYNOTES

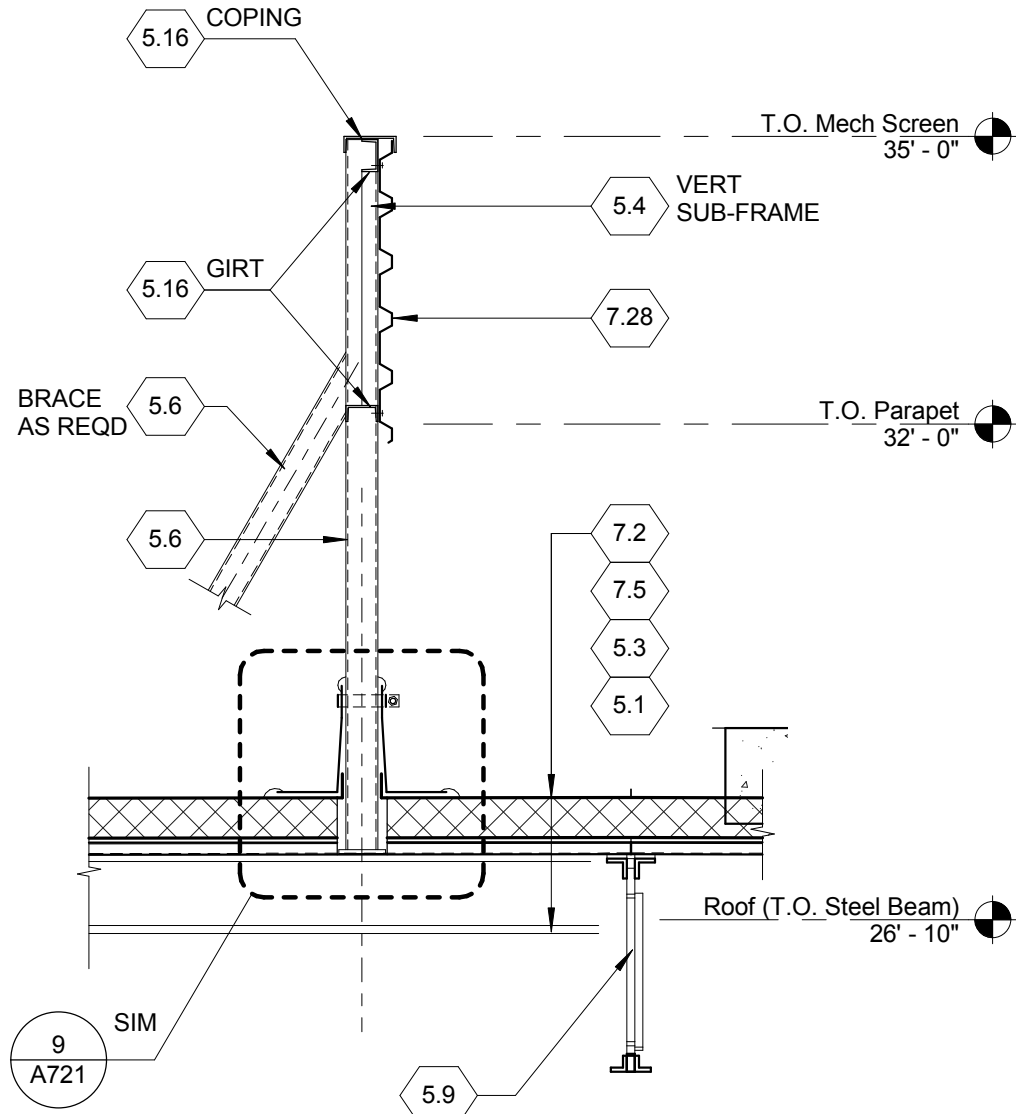
- DIVISION 03 - CONCRETE**
- 3.1 CAST IN PLACE CONCRETE
 - 3.2 6" CONC HOUSEKEEPING PAD
 - 3.3 VAPOR BARRIER
 - 3.4 GRANULAR FILL
 - 3.5 CANE DETECTION AREA
- DIVISION 05 - METALS**
- 5.1 STEEL BEAM
 - 5.2 STEEL COLUMN
 - 5.3 METAL DECK
 - 5.4 STEEL ANGLE
 - 5.5 STEEL PLATE
 - 5.6 TUBULAR STEEL
 - 5.7 STEEL BENT PLATE
 - 5.8 STAINLESS STEEL FRAME
 - 5.9 OPEN WEB STEEL JOIST
 - 5.10 NOT USED
 - 5.11 EXT. COLD FORMED METAL FRAMING, SEE STRUCT.
 - 5.12 NOT USED
 - 5.13 GUARDRAIL
 - 5.14 HANDRAIL
 - 5.15 METAL FRAMED STAIR
 - 5.16 TEEL CHANNEL
 - 5.17 VISUALLY CONTRASTING STAINLESS STEEL STRIP, SEE SHEET 1/A002 FOR ACCESSIBILITY REQUIREMENTS
- DIVISION 06 - WOOD, PLASTIC & COMPOSITES**
- 6.1 WOOD BLOCK/NAILER, PRESSURE TREATED
 - 6.2 3/4" PLYWOOD, FIRE RETARDANT TREATED
 - 6.3 5/8" GLASS MAT FACED GYP SHEATHING
 - 6.4 PLASTIC LAMINATE
 - 6.5 SOLID-SURFACING MATERIAL COUNTERTOP
 - 6.6 RECYCLED WOOD TREAD
- DIVISION 07 - THERMAL & MOISTURE PROTECTION**
- 7.1 STAINLESS STEEL FLASHING/COUNTERFLASHING
 - 7.2 THERMOPLASTIC MEMBRANE ROOFING
 - 7.3 MEMBRANE EDGE FASTENER @ 12" O/C
 - 7.4 SAND COATED ROOF WALKWAY
 - 7.5 RIGID ROOF INSULATION OF AGED R=30 (UON)
 - 7.6 BATT INSULATION R=19
 - 7.7 PVC MEMBRANE FLASHING
 - 7.8 EXTRUDED ALUM TRIM
 - 7.9 ALUM FLASHING
 - 7.10 FORMED SHEET SS COPING
 - 7.11 BELOW GRADE DAMP/WATERPROOFING
 - 7.12 SEALANT WITH BACKER ROD
 - 7.13 20 GA GALVANIZED SPLASH PAN
 - 7.14 DOWN SPOUT
 - 7.15 WATERPROOFING MEMBRANE
 - 7.16 INSULATED METAL PANEL CLADDING
 - 7.17 ROOF SEISMIC JOINT COVER
 - 7.18 EXTERIOR WALL SEISMIC JOINT COVER
 - 7.19 INTERIOR WALL SEISMIC JOINT COVER
 - 7.20 CEILING SEISMIC JOINT COVER
 - 7.21 FIRESTOPPING
 - 7.22 SAND COATED ROOF WALKWAY
 - 7.23 METAL SPANDREL PANEL (INSULATED)
 - 7.24 THERMOPLASTIC MEMBRANE PARAPET FLASHING
 - 7.25 THERMOPLASTIC MEMBRANE COVER STRIP, HOT-AIR WELDED
 - 7.26 EXTRUDED ALUM BAR W/ FASTENERS @ 12" O.C. MAX
 - 7.27 FLOOR SEISMIC JOINT COVER
 - 7.28 S.S. PERFORATED RIBBED METAL (20 GA)
 - 7.29 METAL PANEL SOFFIT
- DIVISION 08 - OPENINGS**
- 8.1 DOOR & FRAME
 - 8.2 MOTORIZED OPERABLE WINDOW
 - 8.3 MANUAL OPERABLE WINDOW
 - 8.4 AUTOMATIC DOOR BOTTOM
 - 8.5 THRESHOLD
 - 8.6 GLAZED ALUM CURTAIN WALL SYSTEM
 - 8.7 1" INSULATED GLAZING
 - 8.8 FRITTED GLAZING
 - 8.9 SPANDREL GLAZING
 - 8.10 VISION GLASS (SAFETY WHERE REQUIRED)
 - 8.11 RECYCLED GLAZING
 - 8.12 AUTOMATIC ENTRANCE DOOR
 - 8.13 SKYLIGHT
 - 8.14 WEATHERSTRIPPING
 - 8.15 MTL SECURITY GATE
 - 8.16 DOOR PULL
- DIVISION 09 - FINISHES**
- 9.1 1/2" GWB TYPE X
 - 9.2 5/8" GWB TYPE X
 - 9.3 1" GWB SHAFT LINER
 - 9.4 20 GA MTL STUD @ 16" O/C
 - 9.5 SLOTTED TOP TRACK
 - 9.6 METAL STUD TRACK
 - 9.7 COLD FORMED FURRING CHANNEL
 - 9.8 SHAFT WALL STUD MIN 20 GA @ 24" O/C
 - 9.9 FRAMING ANGLE, MIN 20 GA GALV
 - 9.10 FURRING CHANNEL, MIN 20 GA, SIZE AS NOTED
 - 9.11 SHAFT J RUNNER
 - 9.12 CERAMIC TILE
 - 9.13 REINFORCED MORTAR SETTING BED
 - 9.14 SCHEDULED FLOORING
 - 9.15 SUSPENDED GYP BOARD CEILING SYSTEM
 - 9.16 SCHEDULED WALL BASE
 - 9.17 PAINT
 - 9.18 5/8" CEMENTITIOUS TILE BACKER BOARD
 - 9.19 5/8" GLASS MAT FACED TILE BACKER BOARD
 - 9.20 NOT USED
 - 9.21 SOUND ATTENUATION BLANKET
 - 9.22 ACOUSTICAL INSULATION 3" (UON)
 - 9.23 SUSPENDED ACOUSTICAL CEILING
- DIVISION 10 - SPECIALTIES**
- 10.1 TOILET PARTITION
 - 10.2 FIXED SUNSCREEN (BIPV @ BID ALTERNATE)
 - 10.3 METAL LOCKER
 - 10.4 FIRE EXTINGUISHER CABINET
 - 10.5 DOOR STOP
 - 10.6 ALUM LIGHT SHELF (BID ALTERNATE)
 - 10.7 VINE CABLE SYSTEM
 - 10.8 EXTRUDED ALUM LOUVER AIRFOIL
 - 10.9 NOT USED
 - 10.10 ACCESS FLOORING- 10" HIGH
- DIVISION 11 - EQUIPMENT**
- 11.1 MOTORIZED PROJECTION SCREEN
 - 11.2 PROJECTOR
- DIVISION 12 - FURNISHINGS**
- 12.1 MOTORIZED WINDOW SHADE
 - 12.2 SYSTEM FURNITURE, NIC
 - 12.3 ENTRANCE FLOOR MAT & FRAME
- DIVISION 14 - EQUIPMENT**
- 14.1 HYDRAULIC HOLELESS ELEVATOR, 3500 LB
- DIVISION 22 - PLUMBING**
- 22.1 ROOF DRAIN
 - 22.2 OVERFLOW SCUPPER
 - 22.3 VENT THROUGH ROOF
 - 22.4 ELECTRIC WATER COOLER
 - 22.5 KITCHEN SINK
 - 22.6 SERVICE SINK
 - 22.7 FLOOR DRAIN
 - 22.8 FILTERED WATER SYSTEM FAUCET
 - 22.9 DUAL FLUSH TOILET @ WOMEN'S
 - 22.10 HIGH EFFICIENCY TOILET @ MEN'S
 - 22.11 LOW CONSUMPTION URINAL
 - 22.12 COUNTERTOP SINK
 - 22.13 ELECTRONIC LAVATORY FAUCET, TYP.
 - 22.14 HAND SHOWER SET WITH SLIDE BAR
 - 22.15 URINAL ELECTRONIC FLUSH VALVE
- DIVISION 23 - HVAC**
- 23.1 BOILER FLUE
 - 23.2 DUCT
 - 23.3 PERIMETER HYDRONIC HEATER
 - 23.4 FIRE DAMPER
 - 23.5 RADIANT CEILING PANEL
 - 23.6 MECHANICAL SHAFT OPENING
 - 23.7 RADIANT FLOOR SLAB SYSTEM



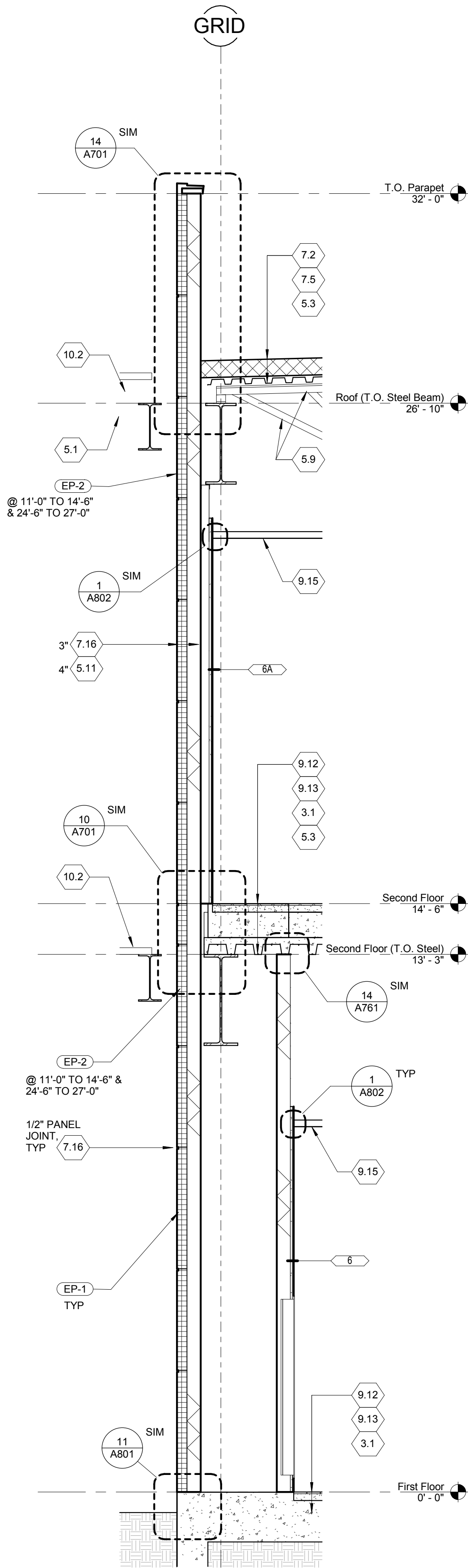
PROJECT STATUS			PRELIMINARY - NOT FOR CONSTRUCTION		
ISSUE	DATE	DESCRIPTION			
1	10/20/2008	30% PRICING			
2	11/07/2008	30% DESIGN REVISION			
3	12/12/2008	60% INTERNAL QA/QC & COST ESTIMATE			
4	12/19/2008	60% PRE-FINAL, NASA REVIEW			
5	01/19/2009	60% FINAL ISSUE TO NASA			
6	02/16/2009	90% QAQC & COST ESTIMATE			
MARK	DATE	DESCRIPTION			
DRAWN	G JOHNSON	DATE			
DESIGNED	WM + P	DATE			
CHECKED	R PRADHAN	DATE			
PROJMG		DATE			
REQUESTOR		DATE			
R&GA		DATE			
SAFETY		DATE			
SUPERVISOR		DATE			
SIZE	CASE CODE		SCALE	INDEX	SHEET OF
D	25307	A232-0800-	A501		



11 | SOFFIT SECTION @ STAIR 2 ROOF
A503 REF: A251 SCALE: 1/2" = 1'-0"



5 | LOUVER SCREEN SECTION @ ROOF
A503 REF: A231 SCALE: 1/2" = 1'-0"




1 | WALL SECTION @ RESTROOMS
A503 REF: A211 SCALE: 1/2" = 1'-0"

MATERIAL KEYNOTES

DIVISION 03 - CONCRETE 3.1 CAST IN PLACE CONCRETE 3.2 6" CONC HOUSEKEEPING PAD 3.3 VAPOR BARRIER 3.4 GRANULAR FILL 3.5 CANE DETECTION AREA	DIVISION 10 - SPECIALTIES 10.1 TOILET PARTITION 10.2 FIXED SUNSCREEN (BIPV @ BID ALTERNATE) 10.3 METAL LOCKER 10.4 FIRE EXTINGUISHER CABINET 10.5 DOOR STOP 10.6 ALUM LIGHT SHELF (BID ALTERNATE) 10.7 VINE CABLE SYSTEM 10.8 EXTRUDED ALUM LOUVER AIRFOIL 10.9 NOT USED 10.10 ACCESS FLOORING- 10" HIGH
DIVISION 05 - METALS 5.1 STEEL BEAM 5.2 STEEL COLUMN 5.3 METAL DECK 5.4 STEEL ANGLE 5.5 STEEL PLATE 5.6 TUBULAR STEEL 5.7 STEEL BENT PLATE 5.8 STAINLESS STEEL FRAME 5.9 OPEN WEB STEEL JOIST 5.10 NOT USED 5.11 EXT. COLD FORMED METAL FRAMING, SEE STRUCT. 5.12 NOT USED 5.13 GUARDRAIL 5.14 HANDRAIL 5.15 METAL FRAMED STAIR 5.16 TEEL CHANNEL 5.17 VISUALLY CONTRASTING STAINLESS STEEL STRIP. SEE SHEET 1/A002 FOR ACCESSIBILITY REQUIREMENTS	DIVISION 11 - EQUIPMENT 11.1 MOTORIZED PROJECTION SCREEN 11.2 PROJECTOR DIVISION 12 - FURNISHINGS 12.1 MOTORIZED WINDOW SHADE 12.2 SYSTEM FURNITURE, NIC 12.3 ENTRANCE FLOOR MAT & FRAME DIVISION 14 - EQUIPMENT 14.1 HYDRAULIC HOLELESS ELEVATOR, 3500 LB
DIVISION 06 - WOOD, PLASTIC & COMPOSITES 6.1 WOOD BLOCK/NAILER, PRESSURE TREATED 6.2 3/4" PLYWOOD, FIRE RETARDANT TREATED 6.3 5/8" GLASS MAT FACED GYP SHEATHING 6.4 PLASTIC LAMINATE 6.5 SOLID-SURFACING MATERIAL COUNTERTOP 6.6 RECYCLED WOOD TREAD	DIVISION 22 - PLUMBING 22.1 ROOF DRAIN 22.2 OVERFLOW SCUPPER 22.3 VENT THROUGH ROOF 22.4 ELECTRIC WATER COOLER 22.5 KITCHEN SINK 22.6 SERVICE SINK 22.7 FLOOR DRAIN 22.8 FILTERED WATER SYSTEM FAUCET 22.9 DUAL FLUSH TOILET @ WOMEN'S 22.10 HIGH EFFICIENCY TOILET @ MEN'S 22.11 LOW CONSUMPTION URINAL 22.12 COUNTERTOP SINK 22.13 ELECTRONIC LAVATORY FAUCET, TYP. 22.14 HAND SHOWER SET WITH SLIDE BAR 22.15 URINAL ELECTRONIC FLUSH VALVE
DIVISION 07 - THERMAL & MOISTURE PROTECTION 7.1 STAINLESS STEEL FLASHING/COUNTERFLASHING 7.2 THERMOPLASTIC MEMBRANE ROOFING 7.3 MEMBRANE EDGE FASTENER @ 12" O/C 7.4 SAND COATED ROOF WALKWAY 7.5 RIGID ROOF INSULATION OF AGED R=30 (UON) 7.6 BATT INSULATION R=19 7.7 PVC MEMBRANE FLASHING 7.8 EXTRUDED ALUM TRIM 7.9 ALUM FLASHING 7.10 FORMED SHEET SS COPING 7.11 BELOW GRADE DAMP/WATERPROOFING 7.12 SEALANT WITH BACKER ROD 7.13 20 GA GALVANIZED SPLASH PAN 7.14 DOWN SPOUT 7.15 WATERPROOFING MEMBRANE 7.16 INSULATED METAL PANEL CLADDING 7.17 ROOF SEISMIC JOINT COVER 7.18 EXTERIOR WALL SEISMIC JOINT COVER 7.19 INTERIOR WALL SEISMIC JOINT COVER 7.20 CEILING SEISMIC JOINT COVER 7.21 FIRES TOPPING 7.22 SAND COATED ROOF WALKWAY 7.23 METAL SPANDREL PANEL (INSULATED) 7.24 THERMOPLASTIC MEMBRANE PARAPET FLASHING 7.25 THERMOPLASTIC MEMBRANE COVER STRIP, HOT-AIR WELDED 7.26 EXTRUDED ALUM BAR W/ FASTENERS @ 12" O.C. MAX 7.27 FLOOR SEISMIC JOINT COVER 7.28 S.S. PERFORATED RIBBED METAL (20 GA) 7.29 METAL PANEL SOFFIT	DIVISION 23 - HVAC 23.1 BOILER FLUE 23.2 DUCT 23.3 PERIMETER HYDRONIC HEATER 23.4 FIRE DAMPER 23.5 RADIANT CEILING PANEL 23.6 MECHANICAL SHAFT OPENING 23.7 RADIANT FLOOR SLAB SYSTEM
DIVISION 08 - OPENINGS 8.1 DOOR & FRAME 8.2 MOTORIZED OPERABLE WINDOW 8.3 MANUAL OPERABLE WINDOW 8.4 AUTOMATIC DOOR BOTTOM 8.5 THRESHOLD 8.6 GLAZED ALUM CURTAIN WALL SYSTEM 8.7 1" INSULATED GLAZING 8.8 FRITTED GLAZING 8.9 SPANDREL GLAZING 8.10 VISION GLASS (SAFETY WHERE REQUIRED) 8.11 RECYCLED GLAZING 8.12 AUTOMATIC ENTRANCE DOOR 8.13 SKYLIGHT 8.14 WEATHERSTRIPPING 8.15 MTL SECURITY GATE 8.16 DOOR PULL	
DIVISION 09 - FINISHES 9.1 1/2" GWB TYPE X 9.2 5/8" GWB TYPE X 9.3 1" GWB SHAFT LINER 9.4 20 GA MTL STUD @ 16" O/C 9.5 SLOTTED TOP TRACK 9.6 METAL STUD TRACK 9.7 COLD FORMED FURRING CHANNEL 9.8 SHAFT WALL STUD MIN 20 GA @ 24" O/C 9.9 FRAMING ANGLE, MIN 20 GA GALV 9.10 FURRING CHANNEL MIN 20 GA, SIZE AS NOTED 9.11 SHAFT J RUNNER 9.12 CERAMIC TILE 9.13 REINFORCED MORTAR SETTING BED 9.14 SCHEDULED FLOORING 9.15 SUSPENDED GYP BOARD CEILING SYSTEM 9.16 SCHEDULED WALL BASE 9.17 PAINT 9.18 5/8" CEMENTITIOUS TILE BACKER BOARD 9.19 5/8" GLASS MAT FACED TILE BACKER BOARD 9.20 NOT USED 9.21 SOUND ATTENUATION BLANKET 9.22 ACOUSTICAL INSULATION 3" (UON) 9.23 SUSPENDED ACOUSTICAL CEILING	

PROJECT STATUS			PRELIMINARY - NOT FOR CONSTRUCTION		
ISSUE	DATE	DESCRIPTION			
1	10/20/2008	30% PRICING			
2	11/07/2008	30% DESIGN REVISION			
3	12/12/2008	60% INTERNAL QA/QC & COST ESTIMATE			
4	12/19/2008	60% PRE-FINAL, NASA REVIEW			
5	01/19/2009	60% FINAL ISSUE TO NASA			
6	02/16/2009	90% QA/QC & COST ESTIMATE			
MARK	DATE	DESCRIPTION			
DRAWN	Author	DATE			
DESIGNED	Designer	DATE			
CHECKED	Checker	DATE			
PROJ/MGR		DATE			
REQUESTOR		DATE			
R&GA		DATE			
SAFETY		DATE			
SUPERVISOR		DATE			
			SIZE	CASE CODE	
			D	25307	
			A232-0800-		A503
			SCALE	INDEX	SHEET OF

**Ames Research Center**
Moffet Field, California

N232 COLLABORATIVE SUPPORT FACILITY

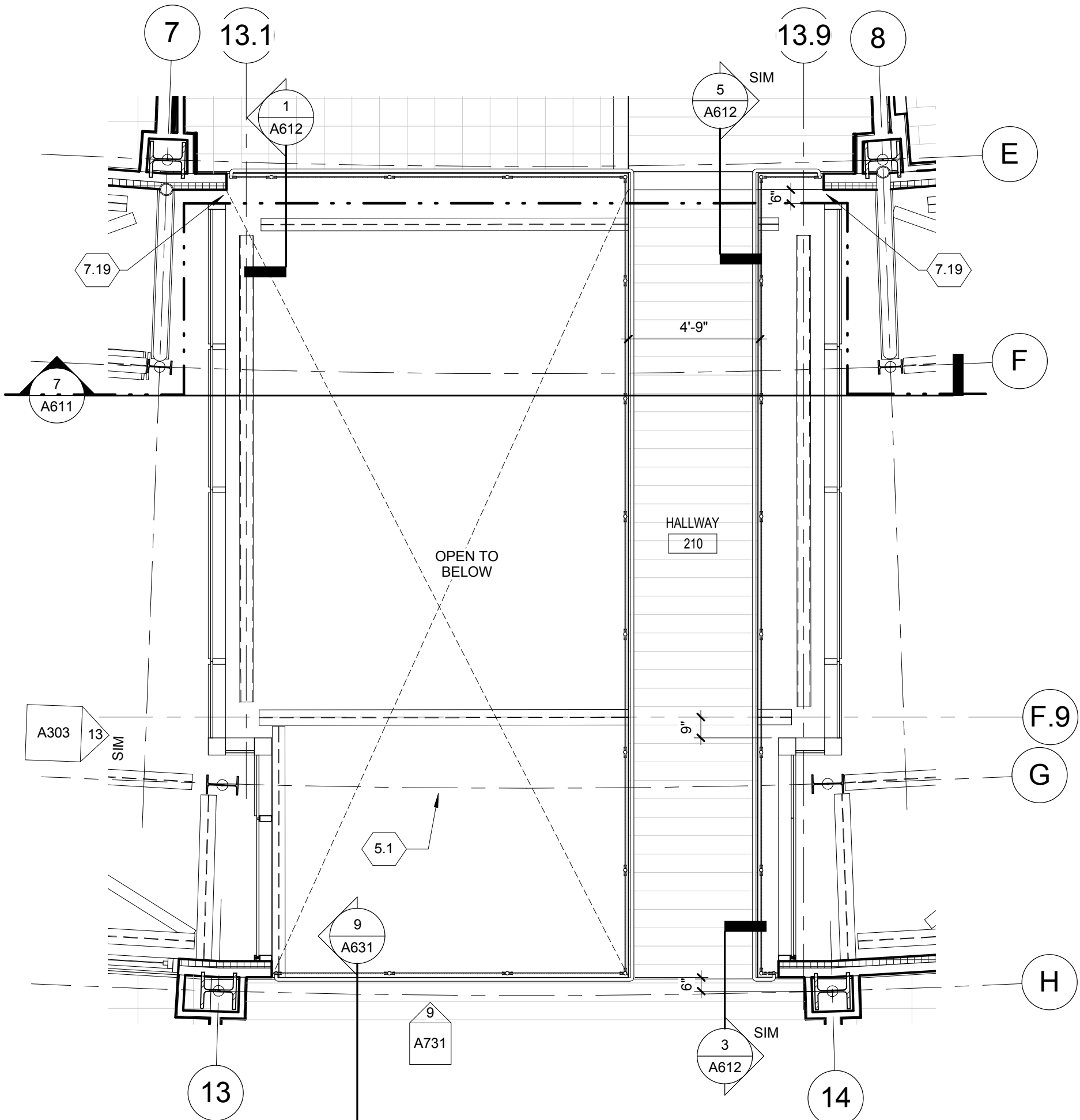
WALL SECTIONS

SIZE	CASE CODE			REV
D	25307	A232-0800-	A503	
SCALE		INDEX	SHEET	OF

2/16/2009 6:14:58 PM

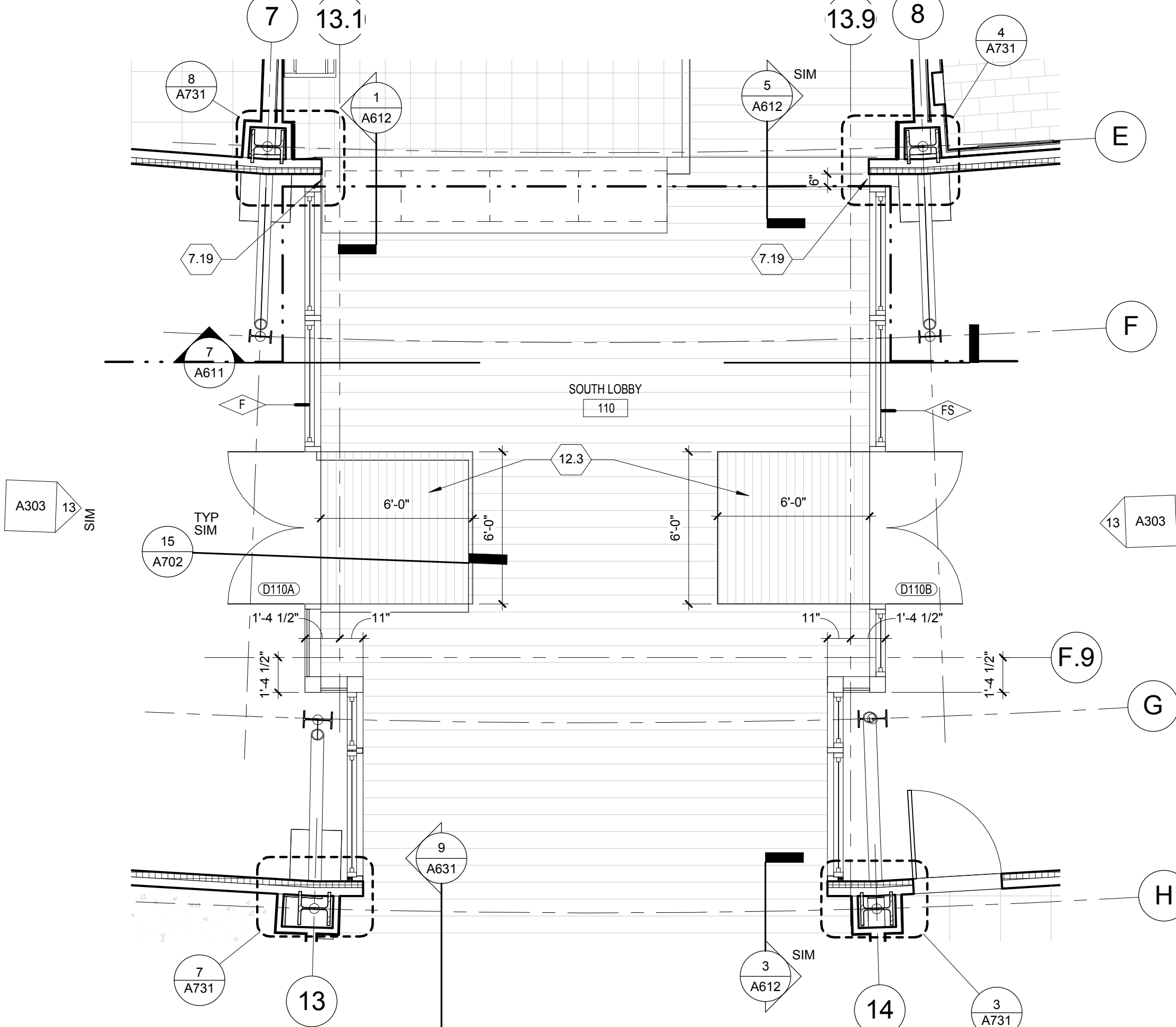
13 ENLARGED CONNECTOR PLAN- SECOND FLOOR

A611 REF: A222 SCALE: 1/4" = 1'-0"



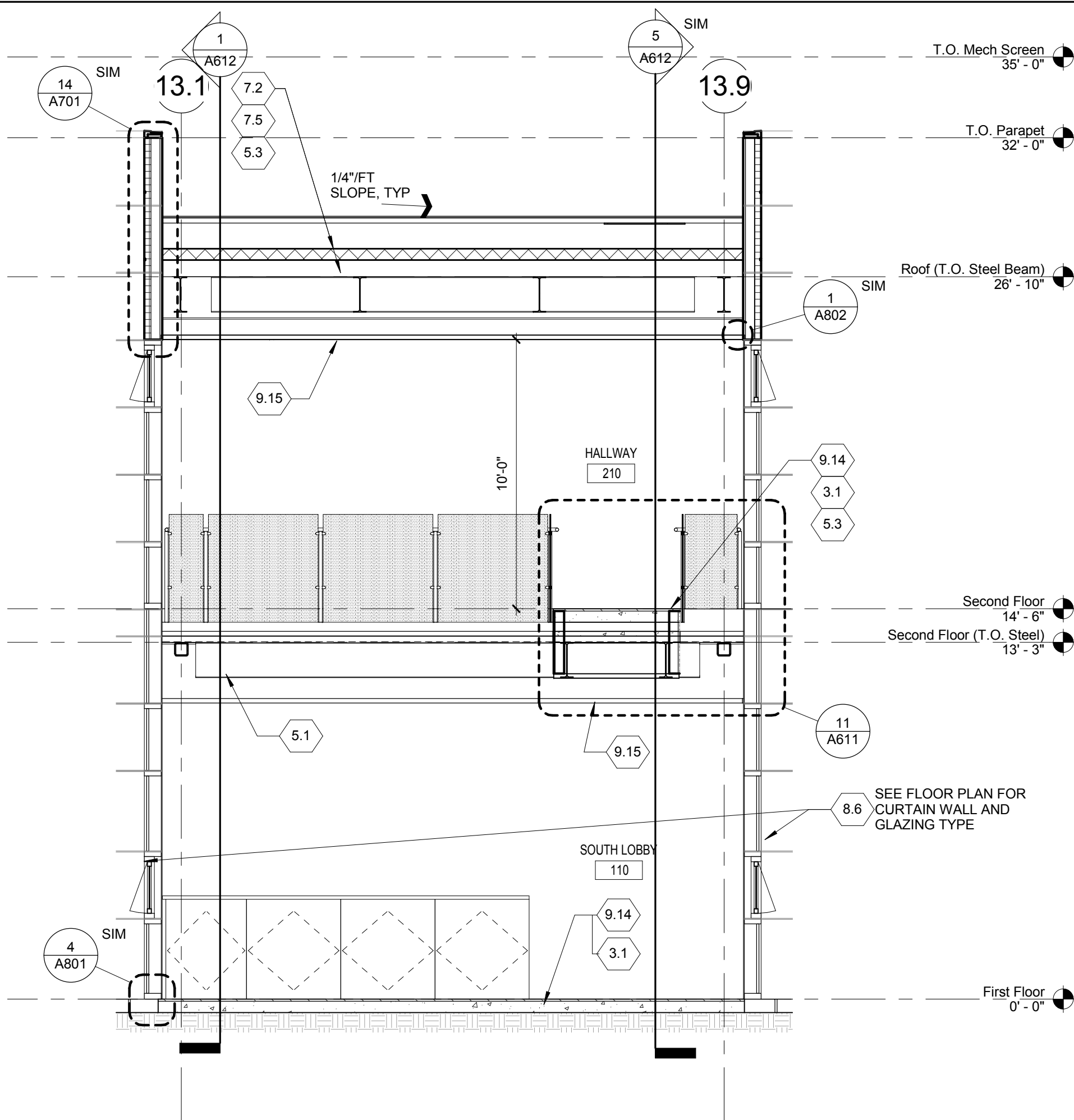
5 ENLARGED CONNECTOR PLAN- FIRST FLOOR

A611 REF: A211 SCALE: 1/4" = 1'-0"



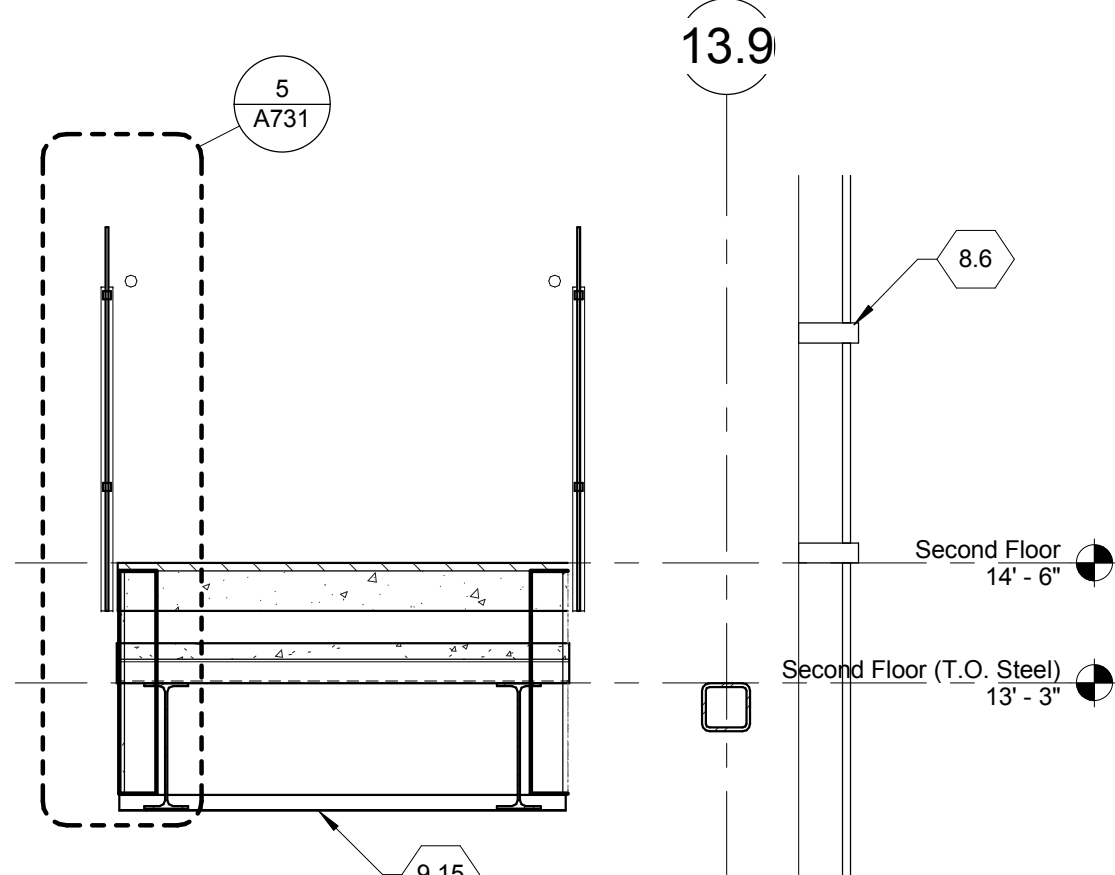
7 CROSS SECTION @ CONNECTOR (NORTH VIEW)

A611 REF: A231 SCALE: 1/4" = 1'-0"



11 CONNECTOR WALKWAY SECTION

A611 REF: A611 SCALE: 1/2" = 1'-0"



MATERIAL KEYNOTES

- DIVISION 03 - CONCRETE**
- 3.1 CAST IN PLACE CONCRETE
 - 3.2 6" CONC HOUSEKEEPING PAD
 - 3.3 VAPOR BARRIER
 - 3.4 GRANULAR FILL
 - 3.5 CANE DETECTION AREA
- DIVISION 05 - METALS**
- 5.1 STEEL BEAM
 - 5.2 STEEL COLUMN
 - 5.3 METAL DECK
 - 5.4 STEEL ANGLE
 - 5.5 STEEL PLATE
 - 5.6 TUBULAR STEEL
 - 5.7 STEEL BENT PLATE
 - 5.8 STAINLESS STEEL FRAME
 - 5.9 OPEN WEB STEEL JOIST
 - 5.10 NOT USED
 - 5.11 EXT. COLD FORMED METAL FRAMING, SEE STRUCT.
 - 5.12 NOT USED
 - 5.13 GUARDRAIL
 - 5.14 HANDRAIL
 - 5.15 METAL FRAMED STAIR
 - 5.16 TEEL CHANNEL
 - 5.17 VISUALLY CONTRASTING STAINLESS STEEL STRIP, SEE SHEET 1/A002 FOR ACCESSIBILITY REQUIREMENTS
- DIVISION 06 - WOOD, PLASTIC & COMPOSITES**
- 6.1 WOOD BLOCK/NAILER, PRESSURE TREATED
 - 6.2 3/4" PLYWOOD, FIRE RETARDANT TREATED
 - 6.3 5/8" GLASS MAT FACED GYP SHEATHING
 - 6.4 PLASTIC LAMINATE
 - 6.5 SOLID-SURFACING MATERIAL COUNTERTOP
 - 6.6 RECYCLED WOOD TREAD
- DIVISION 07 - THERMAL & MOISTURE PROTECTION**
- 7.1 STAINLESS STEEL FLASHING/COUNTERFLASHING
 - 7.2 THERMOPLASTIC MEMBRANE ROOFING
 - 7.3 MEMBRANE EDGE FASTENER @ 12" O/C
 - 7.4 SAND COATED ROOF WALKWAY
 - 7.5 RIGID ROOF INSULATION OF AGED R=30 (UON)
 - 7.6 BATT INSULATION R=19
 - 7.7 PVC MEMBRANE FLASHING
 - 7.8 EXTRUDED ALUM TRIM
 - 7.9 ALUM FLASHING
 - 7.10 FORMED SHEET SS COPING
 - 7.11 BELOW GRADE DAMP/WATERPROOFING
 - 7.12 SEALANT WITH BACKER ROD
 - 7.13 20 GA GALVANIZED SPLASH PAN
 - 7.14 DOWN SPOUT
 - 7.15 WATERPROOFING MEMBRANE
 - 7.16 INSULATED METAL PANEL CLADDING
 - 7.17 ROOF SEISMIC JOINT COVER
 - 7.18 EXTERIOR WALL SEISMIC JOINT COVER
 - 7.19 INTERIOR WALL SEISMIC JOINT COVER
 - 7.20 CEILING SEISMIC JOINT COVER
 - 7.21 FIRESTOPPING
 - 7.22 SAND COATED ROOF WALKWAY
 - 7.23 METAL SPANDREL PANEL (INSULATED)
 - 7.24 THERMOPLASTIC MEMBRANE PARAPET FLASHING
 - 7.25 THERMOPLASTIC MEMBRANE COVER STRIP, HOT-AIR WELDED
 - 7.26 EXTRUDED ALUM BAR W/ FASTENERS @ 12" O.C. MAX
 - 7.27 FLOOR SEISMIC JOINT COVER
 - 7.28 S.S. PERFORATED RIBBED METAL (20 GA)
 - 7.29 METAL PANEL SOFFIT
- DIVISION 08 - OPENINGS**
- 8.1 DOOR & FRAME
 - 8.2 MOTORIZED OPERABLE WINDOW
 - 8.3 MANUAL OPERABLE WINDOW
 - 8.4 AUTOMATIC DOOR BOTTOM
 - 8.5 THRESHOLD
 - 8.6 GLAZED ALUM CURTAIN WALL SYSTEM
 - 8.7 1" INSULATED GLAZING
 - 8.8 FRITTED GLAZING
 - 8.9 SPANDREL GLAZING
 - 8.10 VISION GLASS (SAFETY WHERE REQUIRED)
 - 8.11 RECYCLED GLAZING
 - 8.12 AUTOMATIC ENTRANCE DOOR
 - 8.13 SKYLIGHT
 - 8.14 WEATHERSTRIPPING
 - 8.15 MTL SECURITY GATE
 - 8.16 DOOR PULL
- DIVISION 09 - FINISHES**
- 9.1 1/2" GWB TYPE X
 - 9.2 5/8" GWB TYPE X
 - 9.3 1" GWB SHAFT LINER
 - 9.4 20 GA MTL STUD @ 16" O/C
 - 9.5 SLOTTED TOP TRACK
 - 9.6 METAL STUD TRACK
 - 9.7 COLD FORMED FURRING CHANNEL
 - 9.8 SHAFT WALL STUD MIN 20 GA @ 24" O/C
 - 9.9 FRAMING ANGLE, MIN 20 GA GALV
 - 9.10 FURRING CHANNEL MIN 20 GA, SIZE AS NOTED
 - 9.11 SHAFT J RUNNER
 - 9.12 CERAMIC TILE
 - 9.13 REINFORCED MORTAR SETTING BED
 - 9.14 SCHEDULED FLOORING
 - 9.15 SUSPENDED GYP BOARD CEILING SYSTEM
 - 9.16 SCHEDULED WALL BASE
 - 9.17 PAINT
 - 9.18 5/8" CEMENTITIOUS TILE BACKER BOARD
 - 9.19 5/8" GLASS MAT FACED TILE BACKER BOARD
 - 9.20 NOT USED
 - 9.21 SOUND ATTENUATION BLANKET
 - 9.22 ACOUSTICAL INSULATION 3" (UON)
 - 9.23 SUSPENDED ACOUSTICAL CEILING
- DIVISION 10 - SPECIALTIES**
- 10.1 TOILET PARTITION
 - 10.2 FIXED SUNSCREEN (BIPV @ BID ALTERNATE)
 - 10.3 METAL LOCKER
 - 10.4 FIRE EXTINGUISHER CABINET
 - 10.5 DOOR STOP
 - 10.6 ALUM LIGHT SHELF (BID ALTERNATE)
 - 10.7 VINE CABLE SYSTEM
 - 10.8 EXTRUDED ALUM LOUVER AIRFOIL
 - 10.9 NOT USED
 - 10.10 ACCESS FLOORING- 10" HIGH
- DIVISION 11 - EQUIPMENT**
- 11.1 MOTORIZED PROJECTION SCREEN
 - 11.2 PROJECTOR
- DIVISION 12 - FURNISHINGS**
- 12.1 MOTORIZED WINDOW SHADE
 - 12.2 SYSTEM FURNITURE, NIC
 - 12.3 ENTRANCE FLOOR MAT & FRAME
- DIVISION 14 - EQUIPMENT**
- 14.1 HYDRAULIC HOLELESS ELEVATOR, 3500 LB
- DIVISION 22 - PLUMBING**
- 22.1 ROOF DRAIN
 - 22.2 OVERFLOW SCUPPER
 - 22.3 VENT THROUGH ROOF
 - 22.4 ELECTRIC WATER COOLER
 - 22.5 KITCHEN SINK
 - 22.6 SERVICE SINK
 - 22.7 FLOOR DRAIN
 - 22.8 FILTERED WATER SYSTEM FAUCET
 - 22.9 DUAL FLUSH TOILET @ WOMEN'S
 - 22.10 HIGH EFFICIENCY TOILET @ MEN'S
 - 22.11 LOW CONSUMPTION URINAL
 - 22.12 COUNTERTOP SINK
 - 22.13 ELECTRONIC LAVATORY FAUCET, TYP.
 - 22.14 HAND SHOWER SET WITH SLIDE BAR
 - 22.15 URINAL ELECTRONIC FLUSH VALVE
- DIVISION 23 - HVAC**
- 23.1 BOILER FLUE
 - 23.2 DUCT
 - 23.3 PERIMETER HYDRONIC HEATER
 - 23.4 FIRE DAMPER
 - 23.5 RADIANT CEILING PANEL
 - 23.6 MECHANICAL SHAFT OPENING
 - 23.7 RADIANT FLOOR SLAB SYSTEM

SCALE: 3/16" = 1'-0"

0' 2' 6' 12' 21'-4"

PRELIMINARY - NOT FOR CONSTRUCTION

PROJECT STATUS		
ISSUE	DATE	DESCRIPTION
1	10/20/2008	30% PRICING
2	11/07/2008	30% DESIGN REVISION
3	12/12/2008	60% INTERNAL QA/QC & COST ESTIMATE
4	12/19/2008	60% PRE-FINAL, NASA REVIEW
5	01/19/2009	60% FINAL ISSUE TO NASA
6	02/16/2009	90% QA/QC & COST ESTIMATE
MARK	DATE	DESCRIPTION
DRAWN	G JOHNSON	DATE
DESIGNED	WM+P	DATE
CHECKED	R PRADHAN	DATE
PROJ/MGR		DATE
REQUESTOR		DATE
R&QA		DATE
SAFETY		DATE
SUPERVISOR		DATE
SIZE	CASE CODE	REV
D	25307	A611
SCALE	INDEX	SHEET OF

Ames Research Center
Moffet Field, California

N232 COLLABORATIVE SUPPORT FACILITY

ENLARGED PLAN, ELEVATION & SECTION - CONNECTOR

MATERIAL KEYNOTES

- DIVISION 03 - CONCRETE

3.1 CAST IN PLACE CONCRETE

3.2 6" CONC HOUSEKEEPING PAD

3.3 VAPOR BARRIER

3.4 GRANULAR FILL

3.5 CANE DETECTION AREA
- DIVISION 05 - METALS

5.1 STEEL BEAM

5.2 STEEL COLUMN

5.3 METAL DECK

5.4 STEEL ANGLE

5.5 STEEL PLATE

5.6 TUBULAR STEEL

5.7 STEEL BENT PLATE

5.8 STAINLESS STEEL FRAME

5.9 OPEN WEB STEEL JOIST

5.10 NOT USED

5.11 EXT. COLD FORMED METAL FRAMING, SEE STRUCT.

5.12 NOT USED

5.13 GUARDRAIL

5.14 HANDRAIL

5.15 METAL FRAMED STAIR

5.16 TEEL CHANNEL

5.17 VISUALLY CONTRASTING STAINLESS STEEL STRIP, SEE SHEET 1/A002 FOR ACCESSIBILITY REQUIREMENTS
- DIVISION 06 - WOOD, PLASTIC & COMPOSITES

6.1 WOOD BLOCK/NAILER, PRESSURE TREATED

6.2 3/4" PLYWOOD, FIRE RETARDANT TREATED

6.3 5/8" GLASS MAT FACED GYP SHEATHING

6.4 PLASTIC LAMINATE

6.5 SOLID-SURFACING MATERIAL COUNTERTOP

6.6 RECYCLED WOOD TREAD
- DIVISION 07 - THERMAL & MOISTURE PROTECTION

7.1 STAINLESS STEEL FLASHING/COUNTERFLASHING

7.2 THERMOPLASTIC MEMBRANE ROOFING

7.3 MEMBRANE EDGE FASTENER @ 12" O/C

7.4 SAND COATED ROOF WALKWAY

7.5 RIGID ROOF INSULATION OF AGED R=30 (UON)

7.6 BATT INSULATION R=19

7.7 PVC MEMBRANE FLASHING

7.8 EXTRUDED ALUM TRIM

7.9 ALUM FLASHING

7.10 FORMED SHEET SS COPING

7.11 BELOW GRADE DAMP/WATERPROOFING

7.12 SEALANT WITH BACKER ROD

7.13 20 GA GALVANIZED SPLASH PAN

7.14 DOWN SPOUT

7.15 WATERPROOFING MEMBRANE

7.16 INSULATED METAL PANEL CLADDING

7.17 ROOF SEISMIC JOINT COVER

7.18 EXTERIOR WALL SEISMIC JOINT COVER

7.19 INTERIOR WALL SEISMIC JOINT COVER

7.20 CEILING SEISMIC JOINT COVER

7.21 FIRESTOPPING

7.22 SAND COATED ROOF WALKWAY

7.23 METAL SPANDREL PANEL (INSULATED)

7.24 THERMOPLASTIC MEMBRANE PARAPET FLASHING

7.25 THERMOPLASTIC MEMBRANE COVER STRIP, HOT-AIR WELDED

7.26 EXTRUDED ALUM BAR W/ FASTENERS @ 12" O.C.MAX

7.27 FLOOR SEISMIC JOINT COVER

7.28 S.S. PERFORATED RIBBED METAL (20 GA)

7.29 METAL PANEL SOFFIT
- DIVISION 08 - OPENINGS

8.1 DOOR & FRAME

8.2 MOTORIZED OPERABLE WINDOW

8.3 MANUAL OPERABLE WINDOW

8.4 AUTOMATIC DOOR BOTTOM

8.5 THRESHOLD

8.6 GLAZED ALUM CURTAIN WALL SYSTEM

8.7 1" INSULATED GLAZING

8.8 FRITTED GLAZING

8.9 SPANDREL GLAZING

8.10 VISION GLASS (SAFETY WHERE REQUIRED)

8.11 RECYCLED GLAZING

8.12 AUTOMATIC ENTRANCE DOOR

8.13 SKYLIGHT

8.14 WEATHERSTRIPPING

8.15 MTL SECURITY GATE

8.16 DOOR PULL
- DIVISION 09 - FINISHES

9.1 1/2" GWB TYPE X

9.2 5/8" GWB TYPE X

9.3 1" GWB SHAFT LINER

9.4 20 GA MTL STUD @ 16" O/C

9.5 SLOTTED TOP TRACK

9.6 METAL STUD TRACK

9.7 COLD FORMED FURRING CHANNEL

9.8 SHAFT WALL STUD MIN 20 GA @ 24" O/C

9.9 FRAMING ANGLE, MIN 20 GA GALV

9.10 FURRING CHANNEL MIN 20 GA, SIZE AS NOTED

9.11 SHAFT J RUNNER

9.12 CERAMIC TILE

9.13 REINFORCED MORTAR SETTING BED

9.14 SCHEDULED FLOORING

9.15 SUSPENDED GYP BOARD CEILING SYSTEM

9.16 SCHEDULED WALL BASE

9.17 PAINT

9.18 5/8" CEMENTITIOUS TILE BACKER BOARD

9.19 5/8" GLASS MAT FACED TILE BACKER BOARD

9.20 NOT USED

9.21 SOUND ATTENUATION BLANKET

9.22 ACOUSTICAL INSULATION 3" (UON)

9.23 SUSPENDED ACOUSTICAL CEILING
- DIVISION 10 - SPECIALTIES

10.1 TOILET PARTITION

10.2 FIXED SUNSCREEN (BIPV @ BID ALTERNATE)

10.3 METAL LOCKER

10.4 FIRE EXTINGUISHER CABINET

10.5 DOOR STOP

10.6 ALUM LIGHT SHELF (BID ALTERNATE)

10.7 VINE CABLE SYSTEM

10.8 EXTRUDED ALUM LOUVER AIRFOIL

10.9 NOT USED

10.10 ACCESS FLOORING- 10" HIGH
- DIVISION 11 - EQUIPMENT

11.1 MOTORIZED PROJECTION SCREEN

11.2 PROJECTOR
- DIVISION 12 - FURNISHINGS

12.1 MOTORIZED WINDOW SHADE

12.2 SYSTEM FURNITURE, NIC

12.3 ENTRANCE FLOOR MAT & FRAME
- DIVISION 14 - EQUIPMENT

14.1 HYDRAULIC HOLELESS ELEVATOR, 3500 LB
- DIVISION 22 - PLUMBING

22.1 ROOF DRAIN

22.2 OVERFLOW SCUPPER

22.3 VENT THROUGH ROOF

22.4 ELECTRIC WATER COOLER

22.5 KITCHEN SINK

22.6 SERVICE SINK

22.7 FLOOR DRAIN

22.8 FILTERED WATER SYSTEM FAUCET

22.9 DUAL FLUSH TOILET @ WOMEN'S

22.10 HIGH EFFICIENCY TOILET @ MEN'S

22.11 LOW CONSUMPTION URINAL

22.12 COUNTERTOP SINK

22.13 ELECTRONIC LAVATORY FAUCET, TYP.

22.14 HAND SHOWER SET WITH SLIDE BAR

22.15 URINAL ELECTRONIC FLUSH VALVE
- DIVISION 23 - HVAC

23.1 BOILER FLUE

23.2 DUCT

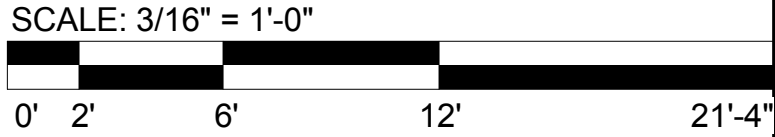
23.3 PERIMETER HYDRONIC HEATER

23.4 FIRE DAMPER

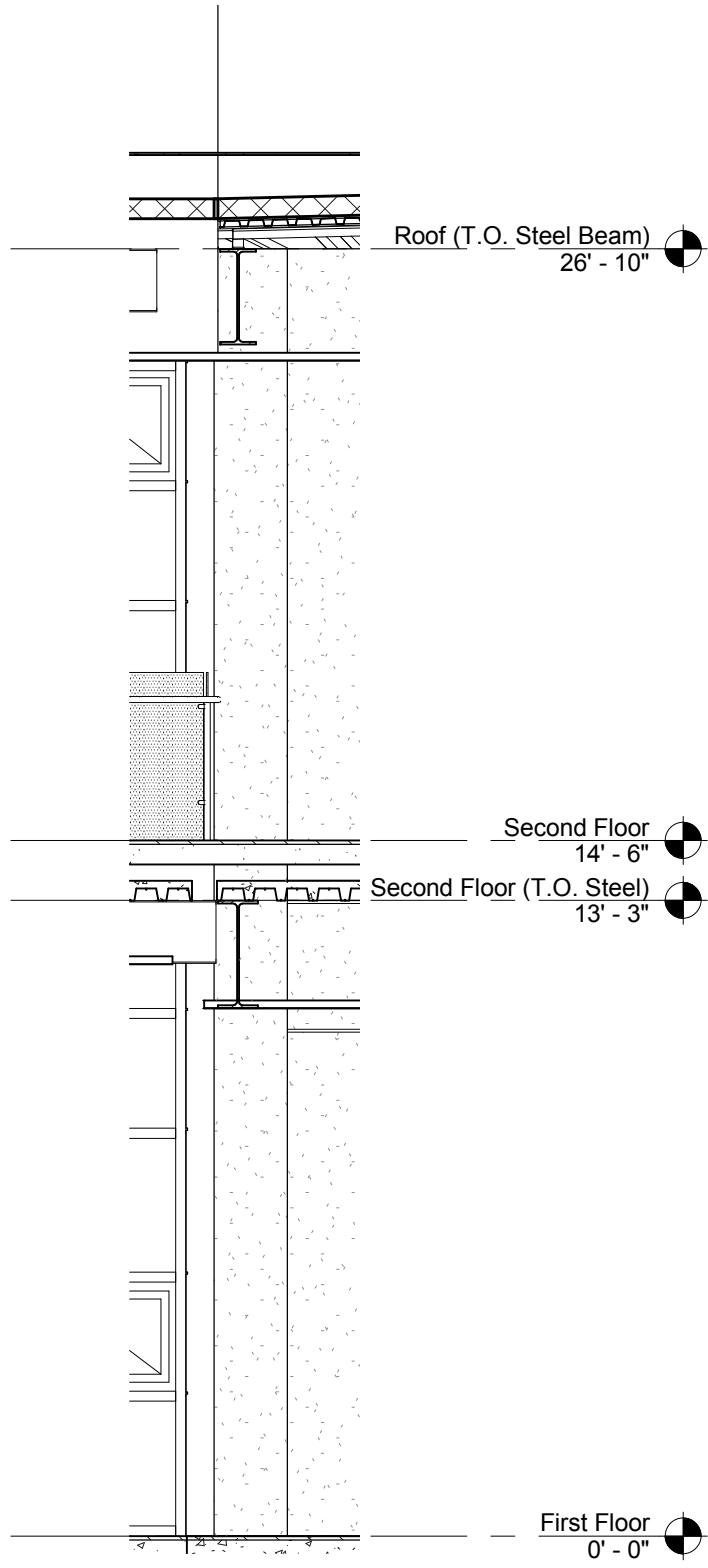
23.5 RADIANT CEILING PANEL

23.6 MECHANICAL SHAFT OPENING

23.7 RADIANT FLOOR SLAB SYSTEM

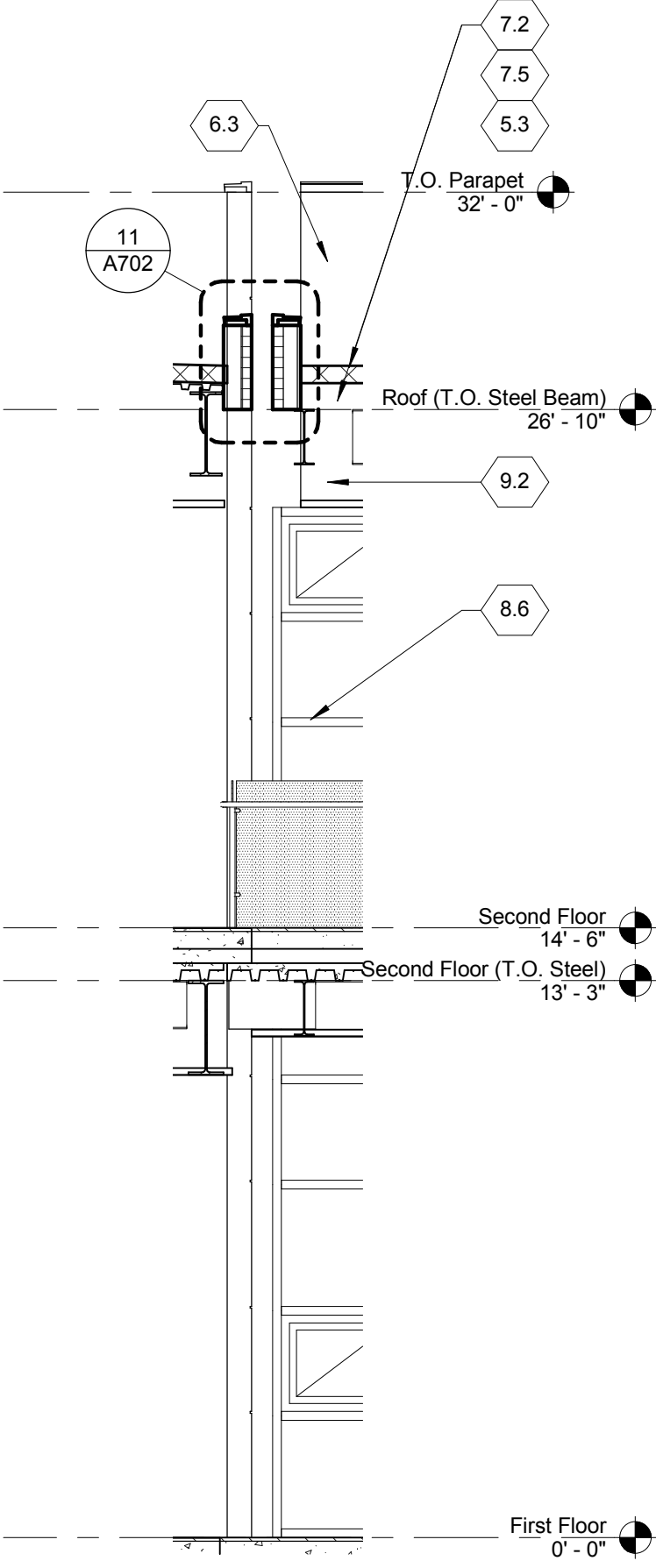


PROJECT STATUS		
PRELIMINARY - NOT FOR CONSTRUCTION		
ISSUE	DATE	DESCRIPTION
1	10/20/2008	30% PRICING
2	11/07/2008	30% DESIGN REVISION
3	12/12/2008	60% INTERNAL QA/QC & COST ESTIMATE
4	12/19/2008	60% PRE-FINAL, NASA REVIEW
5	01/19/2009	60% FINAL ISSUE TO NASA
6	02/16/2009	90% QAQC & COST ESTIMATE
MARK	DATE	DESCRIPTION
DRAWN	G JOHNSON	<div><div><div></div></div><div>Ames Research Center Moffet Field, California</div></div> <div>N232 COLLABORATIVE SUPPORT FACILITY</div> <div>ENLARGED PLAN, ELEVATION & SECTION - CONNECTOR</div>
DESIGNED	WM+P	
CHECKED	R PRADHAN	
PROJUMGR		
REQUESTOR		
R&GA		
SAFETY		
SUPERVISOR		
SIZE	CODE CODE	REV
D	25307	A612
SCALE	INDEX	SHEET OF



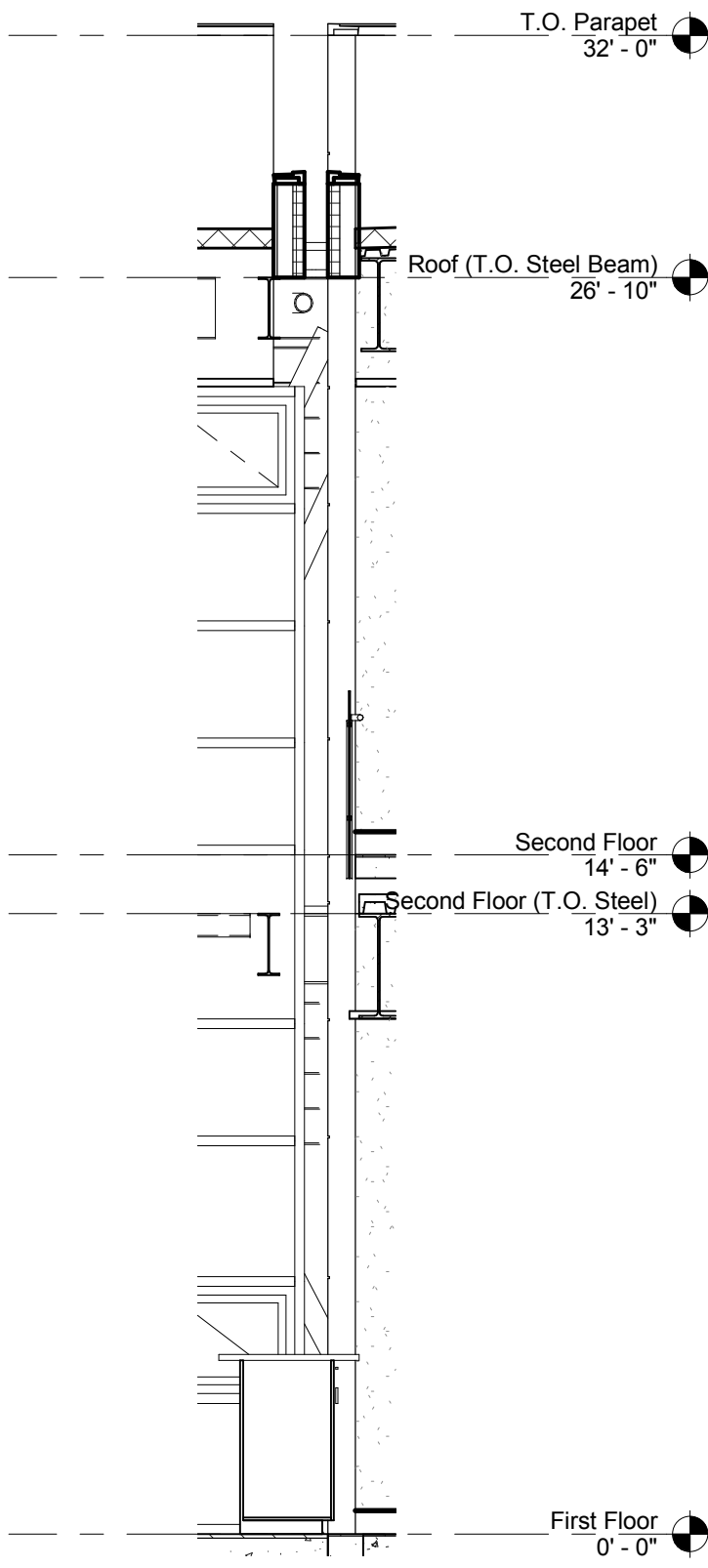
CONNECTOR WALL SECTION @ GRID 14/H

A612 REF:A311 SCALE: 1/4" = 1'-0"



CONNECTOR WALL SECTION @ GRID 8/E

A612 REF:A311 SCALE: 1/4" = 1'-0"



CONNECTOR WALL SECTION @ GRID 7/E

A612 REF:A611 SCALE: 1/4" = 1'-0"

MATERIAL KEYNOTES

- DIVISION 03 - CONCRETE

3.1 CAST IN PLACE CONCRETE

3.2 6" CONC HOUSEKEEPING PAD

3.3 VAPOR BARRIER

3.4 GRANULAR FILL

3.5 CANE DETECTION AREA
- DIVISION 05 - METALS

5.1 STEEL BEAM

5.2 STEEL COLUMN

5.3 METAL DECK

5.4 STEEL ANGLE

5.5 STEEL PLATE

5.6 TUBULAR STEEL

5.7 STEEL BENT PLATE

5.8 STAINLESS STEEL FRAME

5.9 OPEN WEB STEEL JOIST

5.10 NOT USED

5.11 EXT. COLD FORMED METAL FRAMING, SEE STRUCT.

5.12 NOT USED

5.13 GUARDRAIL

5.14 HANDRAIL

5.15 METAL FRAMED STAIR

5.16 TEEL CHANNEL

5.17 VISUALLY CONTRASTING STAINLESS STEEL STRIP, SEE SHEET 1/A002 FOR ACCESSIBILITY REQUIREMENTS
- DIVISION 06 - WOOD, PLASTIC & COMPOSITES

6.1 WOOD BLOCKNAILER, PRESSURE TREATED

6.2 3/4" PLYWOOD, FIRE RETARDANT TREATED

6.3 5/8" GLASS MAT FACED GYP SHEATHING

6.4 PLASTIC LAMINATE

6.5 SOLID-SURFACING MATERIAL COUNTERTOP

6.6 RECYCLED WOOD TREAD
- DIVISION 07 - THERMAL & MOISTURE PROTECTION

7.1 STAINLESS STEEL FLASHING/COUNTERFLASHING

7.2 THERMOPLASTIC MEMBRANE ROOFING

7.3 MEMBRANE EDGE FASTENER @ 12" O/C

7.4 SAND COATED ROOF WALKWAY

7.5 RIGID ROOF INSULATION OF AGED R=30 (UON)

7.6 BATT INSULATION R=19

7.7 PVC MEMBRANE FLASHING

7.8 EXTRUDED ALUM TRIM

7.9 ALUM FLASHING

7.10 FORMED SHEET SS COPING

7.11 BELOW GRADE DAMP/WATERPROOFING

7.12 SEALANT WITH BACKER ROD

7.13 20 GA GALVANIZED SPLASH PAN

7.14 DOWN SPOUT

7.15 WATERPROOFING MEMBRANE

7.16 INSULATED METAL PANEL CLADDING

7.17 ROOF SEISMIC JOINT COVER

7.18 EXTERIOR WALL SEISMIC JOINT COVER

7.19 INTERIOR WALL SEISMIC JOINT COVER

7.20 CEILING SEISMIC JOINT COVER

7.21 FIRESTOPPING

7.22 SAND COATED ROOF WALKWAY

7.23 METAL SPANDREL PANEL (INSULATED)

7.24 THERMOPLASTIC MEMBRANE PARAPET FLASHING

7.25 THERMOPLASTIC MEMBRANE COVER STRIP, HOT-AIR WELDED

7.26 EXTRUDED ALUM BAR W/ FASTENERS @ 12" O.C.MAX

7.27 FLOOR SEISMIC JOINT COVER

7.28 S.S. PERFORATED RIBBED METAL (20 GA)

7.29 METAL PANEL SOFFIT
- DIVISION 08 - OPENINGS

8.1 DOOR & FRAME

8.2 MOTORIZED OPERABLE WINDOW

8.3 MANUAL OPERABLE WINDOW

8.4 AUTOMATIC DOOR BOTTOM

8.5 THRESHOLD

8.6 GLAZED ALUM CURTAIN WALL SYSTEM

8.7 1" INSULATED GLAZING

8.8 FRITTED GLAZING

8.9 SPANDREL GLAZING

8.10 VISION GLASS (SAFETY WHERE REQUIRED)

8.11 RECYCLED GLAZING

8.12 AUTOMATIC ENTRANCE DOOR

8.13 SKYLIGHT

8.14 WEATHERSTRIPPING

8.15 MTL SECURITY GATE

8.16 DOOR PULL
- DIVISION 09 - FINISHES

9.1 1/2" GWB TYPE X

9.2 5/8" GWB TYPE X

9.3 1" GWB SHAFT LINER

9.4 20 GA MTL STUD @ 16" O/C

9.5 SLOTTED TOP TRACK

9.6 METAL STUD TRACK

9.7 COLD FORMED FURRING CHANNEL

9.8 SHAFT WALL STUD MIN 20 GA @ 24" O/C

9.9 FRAMING ANGLE, MIN 20 GA GALV

9.10 FURRING CHANNEL MIN 20 GA, SIZE AS NOTED

9.11 SHAFT J RUNNER

9.12 CERAMIC TILE

9.13 REINFORCED MORTAR SETTING BED

9.14 SCHEDULED FLOORING

9.15 SUSPENDED GYP BOARD CEILING SYSTEM

9.16 SCHEDULED WALL BASE

9.17 PAINT

9.18 5/8" CEMENTITIOUS TILE BACKER BOARD

9.19 5/8" GLASS MAT FACED TILE BACKER BOARD

9.20 NOT USED

9.21 SOUND ATTENUATION BLANKET

9.22 ACOUSTICAL INSULATION 3" (UON)

9.23 SUSPENDED ACOUSTICAL CEILING
- DIVISION 10 - SPECIALTIES

10.1 TOILET PARTITION

10.2 FIXED SUNSCREEN (BIPV @ BID ALTERNATE)

10.3 METAL LOCKER

10.4 FIRE EXTINGUISHER CABINET

10.5 DOOR STOP

10.6 ALUM LIGHT SHELF (BID ALTERNATE)

10.7 VINE CABLE SYSTEM

10.8 EXTRUDED ALUM LOUVER AIRFOIL

10.9 NOT USED

10.10 ACCESS FLOORING- 10" HIGH
- DIVISION 11 - EQUIPMENT

11.1 MOTORIZED PROJECTION SCREEN

11.2 PROJECTOR
- DIVISION 12 - FURNISHINGS

12.1 MOTORIZED WINDOW SHADE

12.2 SYSTEM FURNITURE, NIC

12.3 ENTRANCE FLOOR MAT & FRAME
- DIVISION 14 - EQUIPMENT

14.1 HYDRAULIC HOLELESS ELEVATOR, 3500 LB
- DIVISION 22 - PLUMBING

22.1 ROOF DRAIN

22.2 OVERFLOW SCUPPER

22.3 VENT THROUGH ROOF

22.4 ELECTRIC WATER COOLER

22.5 KITCHEN SINK

22.6 SERVICE SINK

22.7 FLOOR DRAIN

22.8 FILTERED WATER SYSTEM FAUCET

22.9 DUAL FLUSH TOILET @ WOMEN'S

22.10 HIGH EFFICIENCY TOILET @ MEN'S

22.11 LOW CONSUMPTION URINAL

22.12 COUNTERTOP SINK

22.13 ELECTRONIC LAVATORY FAUCET, TYP.

22.14 HAND SHOWER SET WITH SLIDE BAR

22.15 URINAL ELECTRONIC FLUSH VALVE
- DIVISION 23 - HVAC

23.1 BOILER FLUE

23.2 DUCT

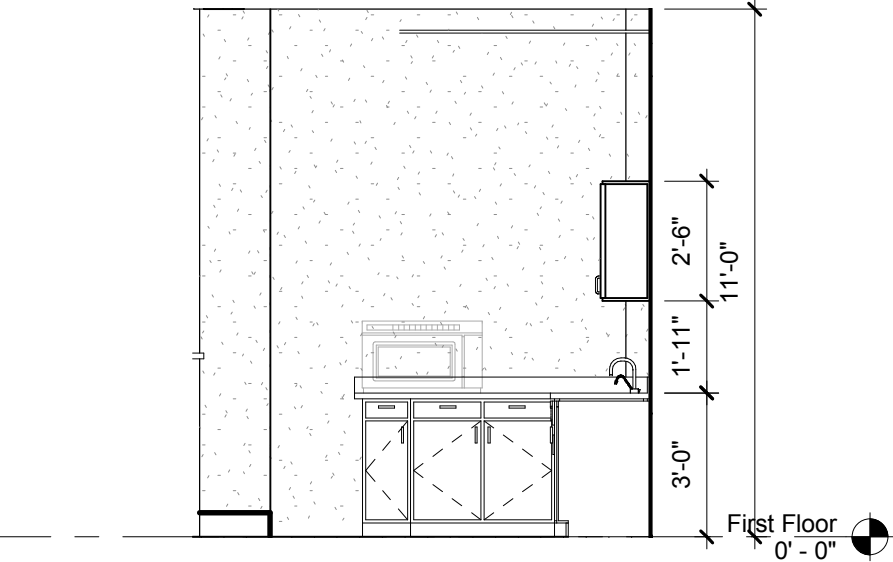
23.3 PERIMETER HYDRONIC HEATER

23.4 FIRE DAMPER

23.5 RADIANT CEILING PANEL

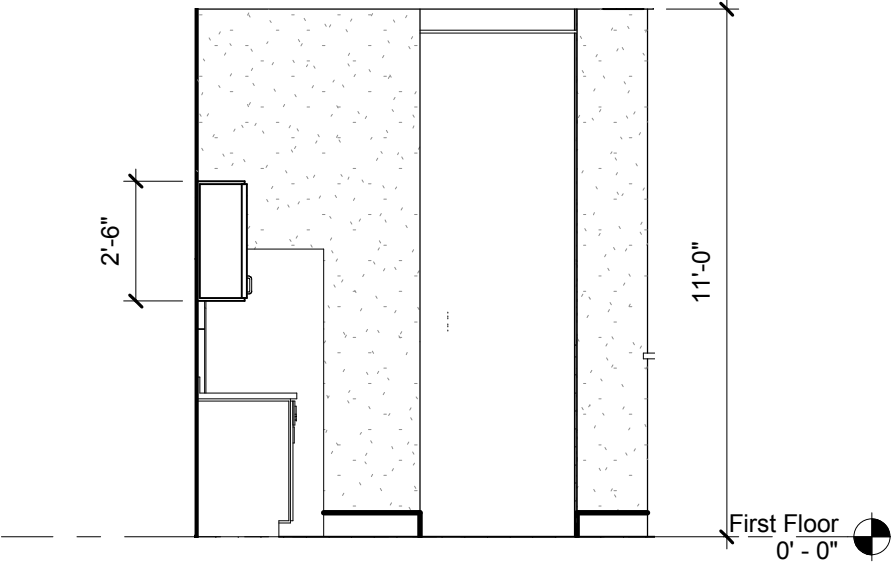
23.6 MECHANICAL SHAFT OPENING

23.7 RADIANT FLOOR SLAB SYSTEM



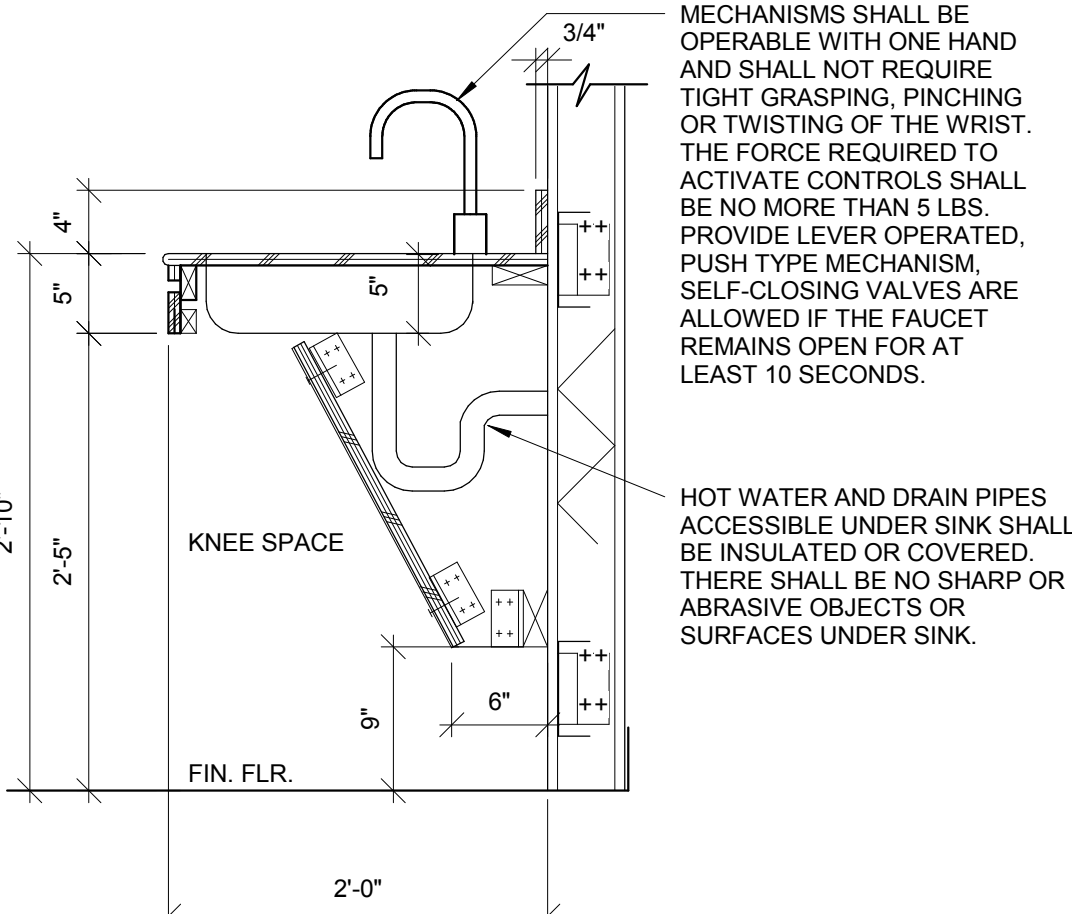
8 | LUNCH ROOM ELEVATION- WEST

A613 REF: A613 SCALE: 1/4" = 1'-0"



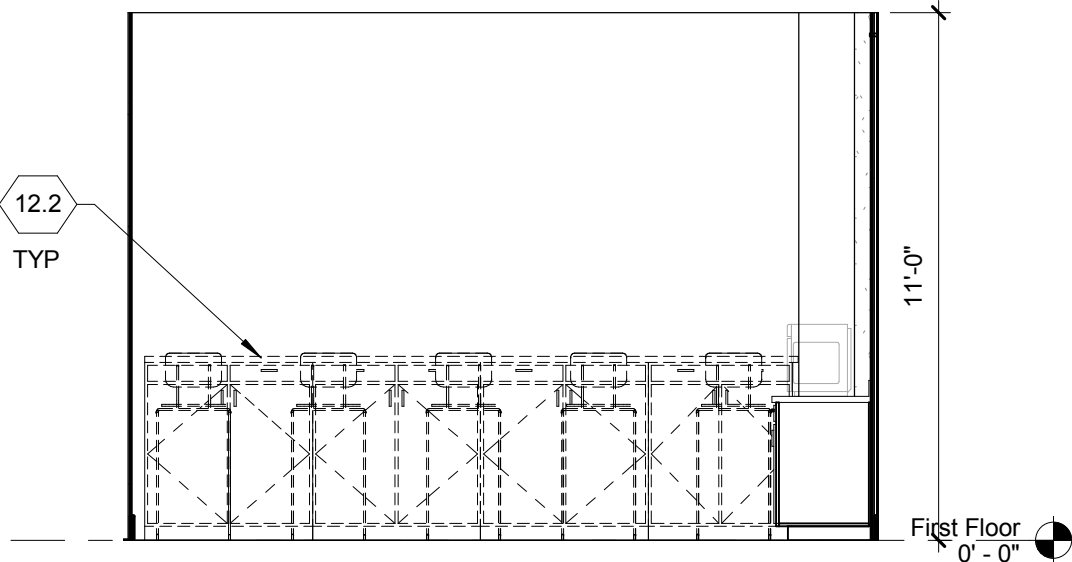
4 | LUNCH ROOM ELEVATION- EAST

A613 REF: A613 SCALE: 1/4" = 1'-0"



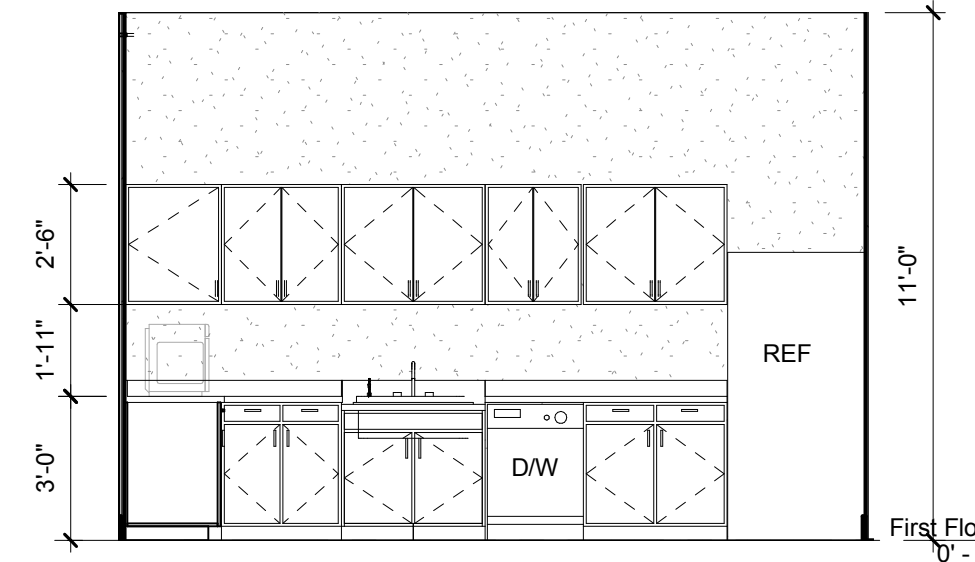
11 | ACCESSIBLE SINK SECTION

A613 REF: SCALE: 1" = 1'-0"



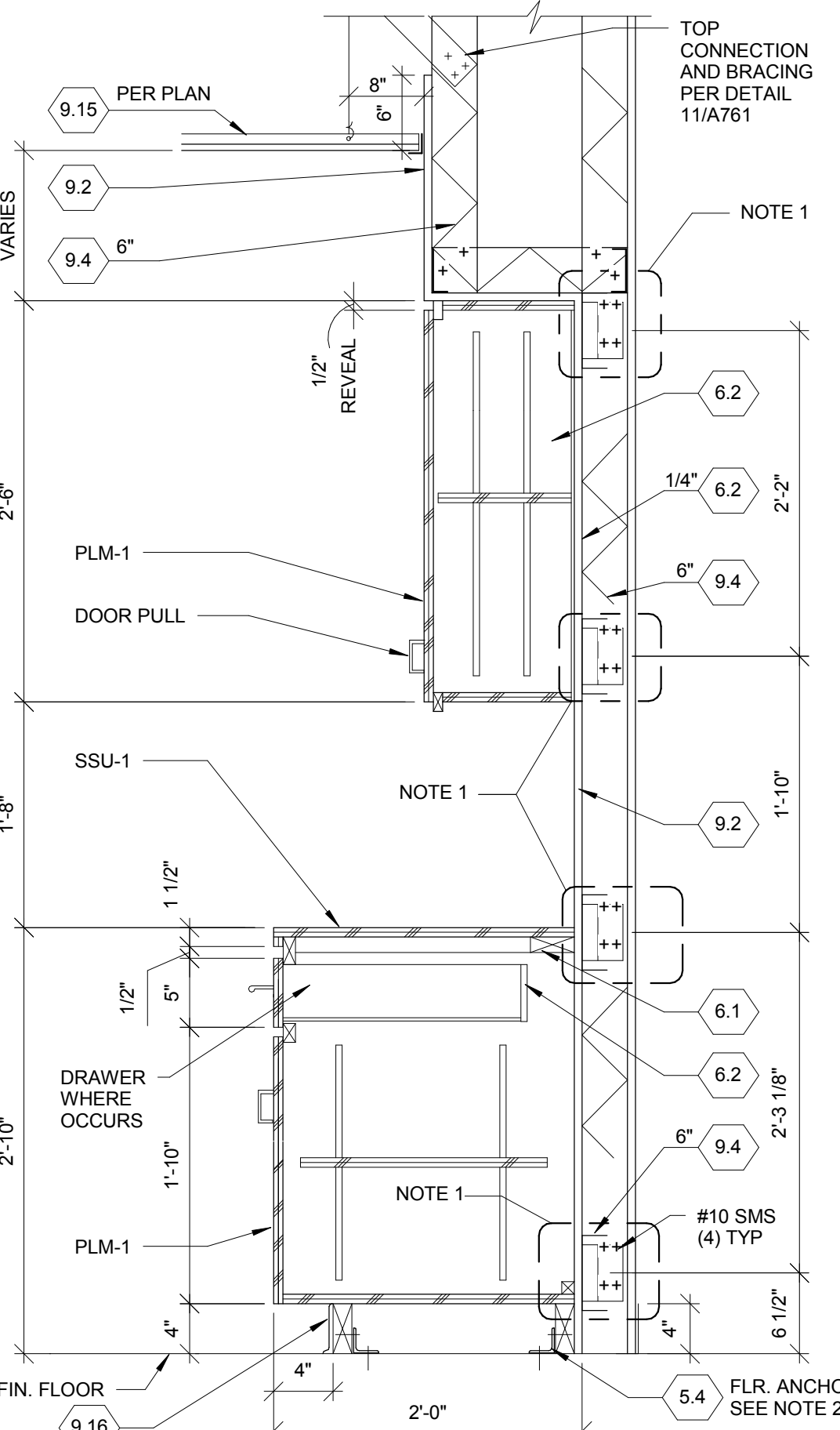
7 | LUNCH ROOM ELEVATION- SOUTH

A613 REF: A613 SCALE: 1/4" = 1'-0"



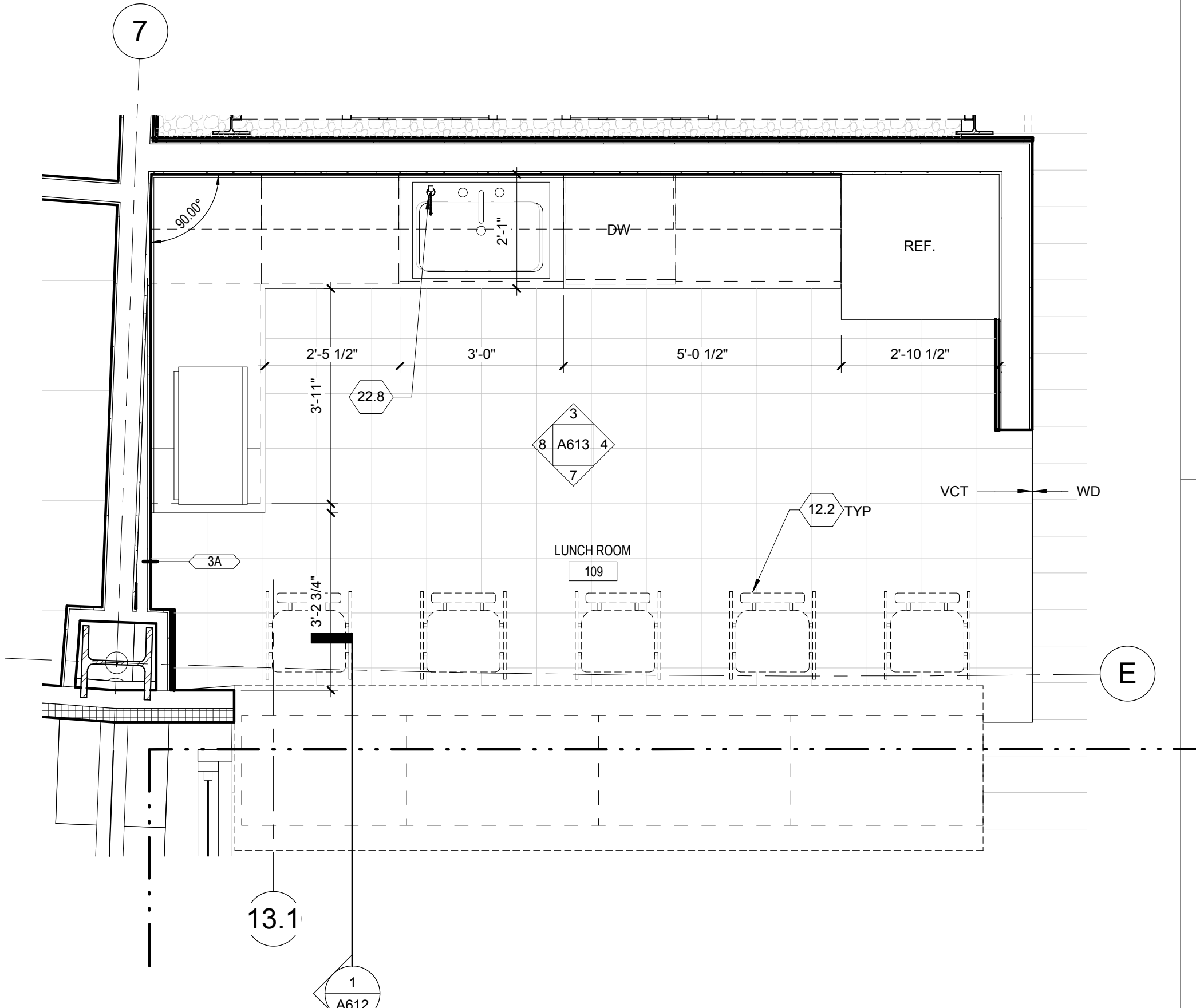
3 | LUNCH ROOM ELEVATION- NORTH

A613 REF: A613 SCALE: 1/4" = 1'-0"



9 | TYP UPPER/LOWER CABINET SECTION

A613 REF: SCALE: 1" = 1'-0"



5 | ENLARGED PLAN- LUNCH ROOM

A613 REF: A211 SCALE: 1/2" = 1'-0"

PRELIMINARY - NOT FOR CONSTRUCTION

ISSUE	DATE	DESCRIPTION
1	10/20/2008	30% PRICING
2	11/07/2008	30% DESIGN REVISION
3	12/12/2008	60% INTERNAL QA/QC & COST ESTIMATE
4	12/19/2008	60% PRE-FINAL, NASA REVIEW
5	01/19/2009	60% FINAL ISSUE TO NASA
6	02/16/2009	90% QAQC & COST ESTIMATE
MARK	DATE	DESCRIPTION
DRAWN	S MOSHGGOU	DATE
DESIGNED	WM+P	DATE
CHECKED	R PRADHAN	DATE
PROJMGJR	DATE	DATE
REQUESTOR	DATE	DATE
R&QA	DATE	DATE
SAFETY	DATE	DATE
SUPERVISOR	DATE	DATE
SIZE	DATE	DATE
D	25307	A232-0800-
SCALE	INDEX	SHEET
OF		

Ames Research Center
Moffet Field, California

N232 COLLABORATIVE SUPPORT FACILITY


ENLARGED PLAN, ELEVATION & SECTION - LUNCH ROOM

A613



SCALE: 1/4" = 1'-0"

A horizontal scale bar with alternating black and white segments. The segments are labeled 0', 2', 4', 8', and 16' from left to right. The bar is divided into four equal sections, each representing 4 feet.

 **Ames Research Center**
Moffet Field, California

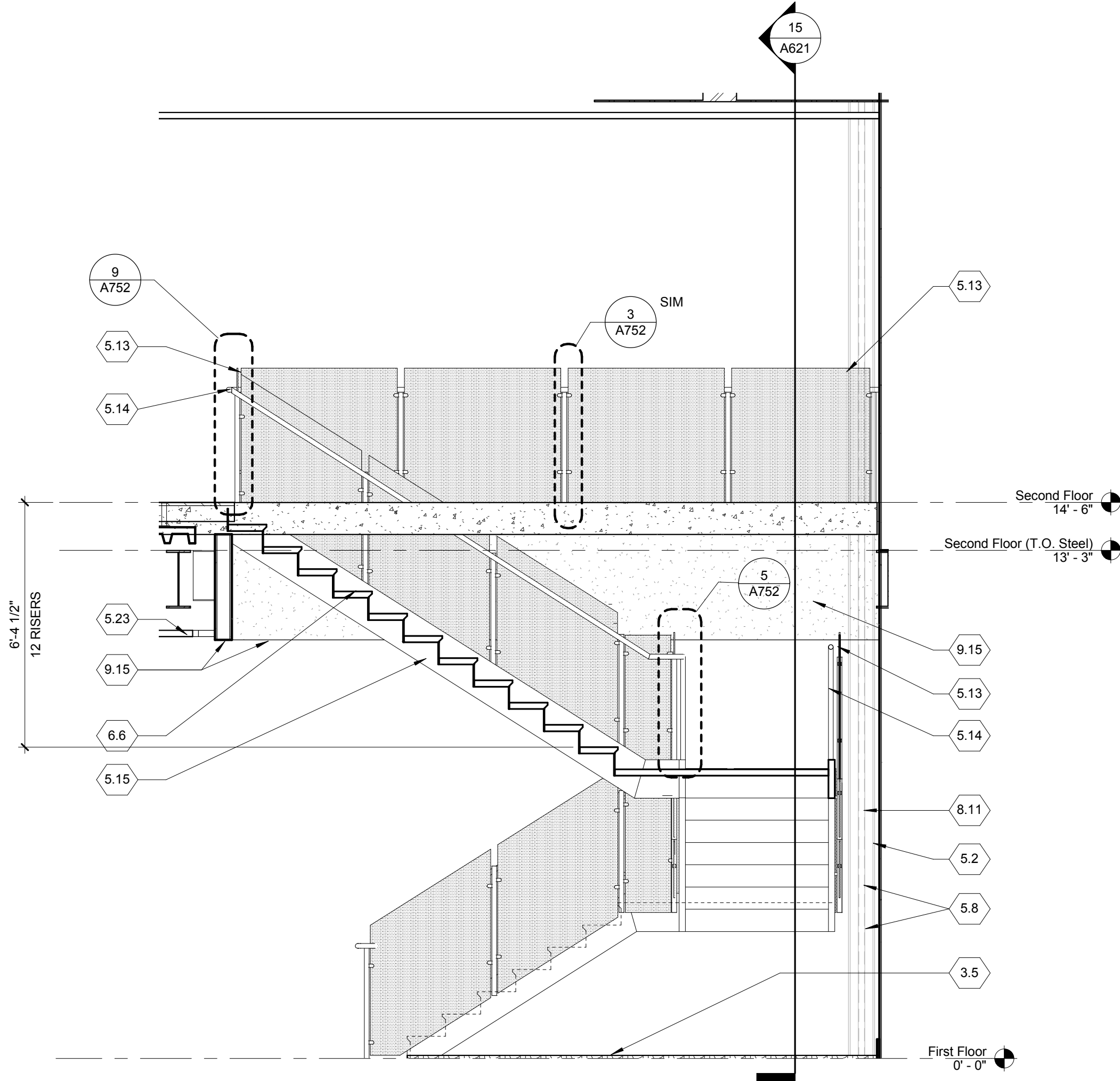
N232 COLLABORATIVE SUPPORT FACILITY

LARGED PLAN, ELEVATIO
SECTION - LOBBY

2/16/2009 6:15:13 PM

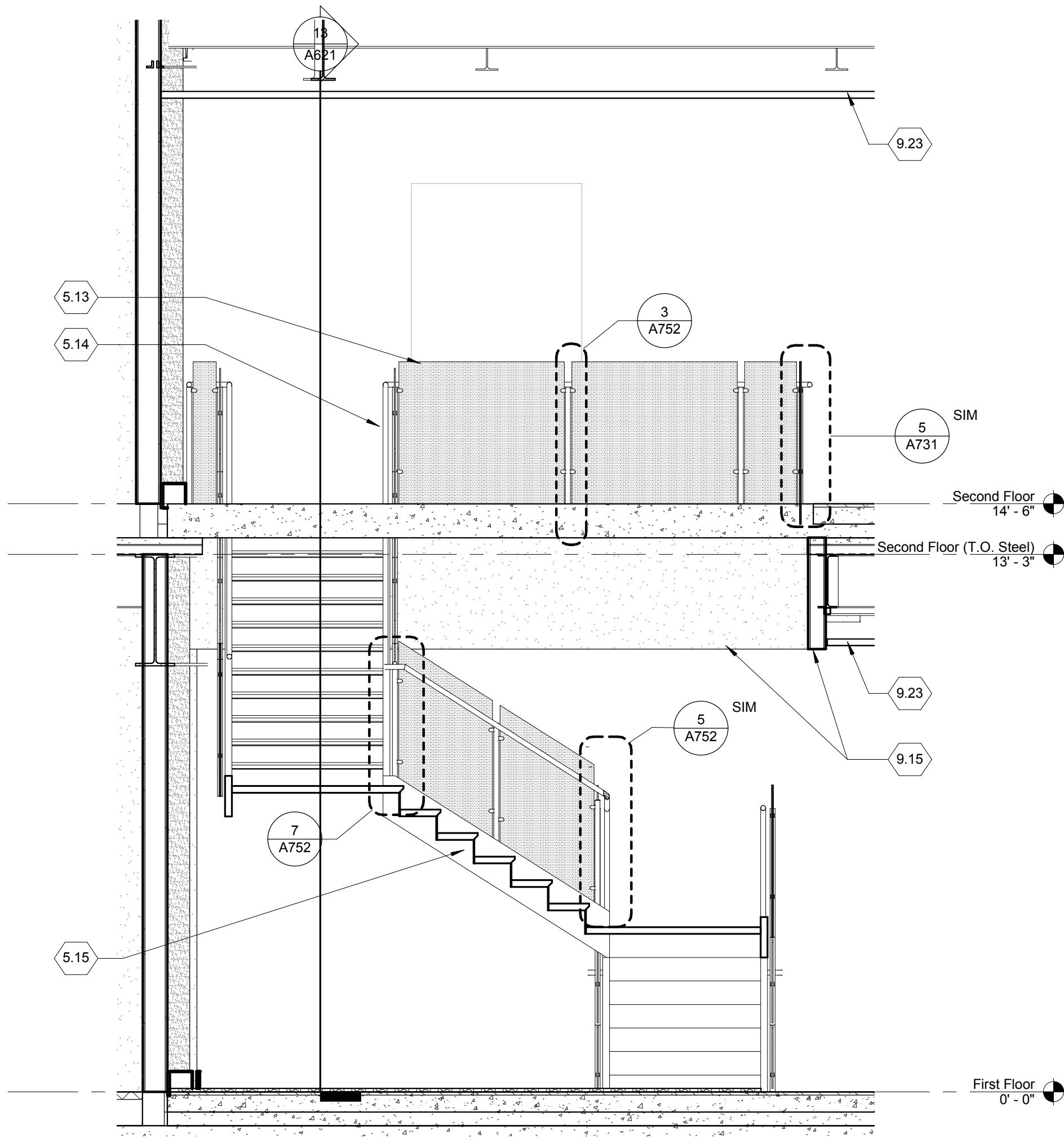
13 STAIR 1 SECTION

A621 REF: A621 SCALE: 3/8" = 1'-0"



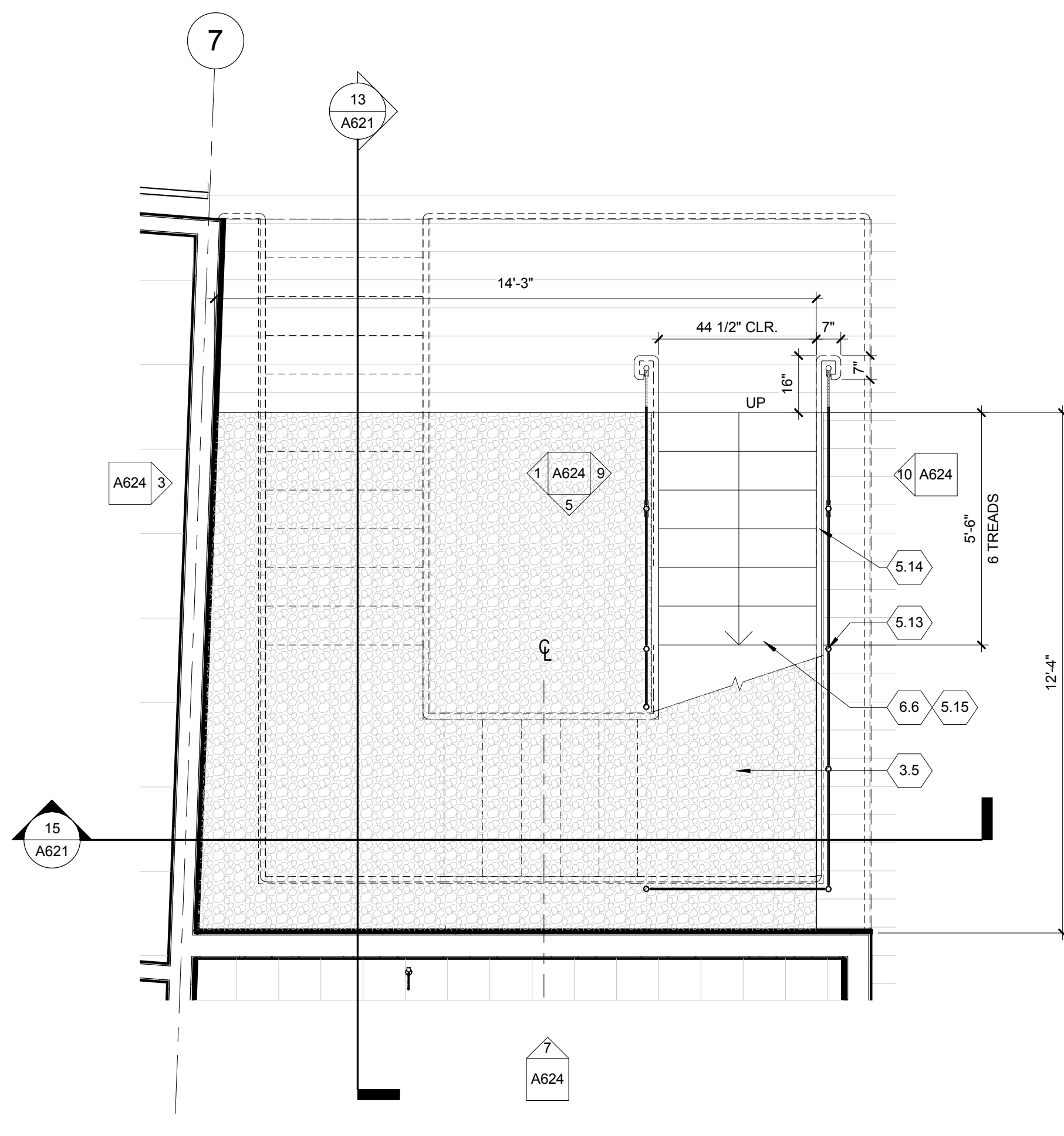
15 STAIR 1 SECTION - TRANSVERSE

A621 REF: A621 SCALE: 3/8" = 1'-0"



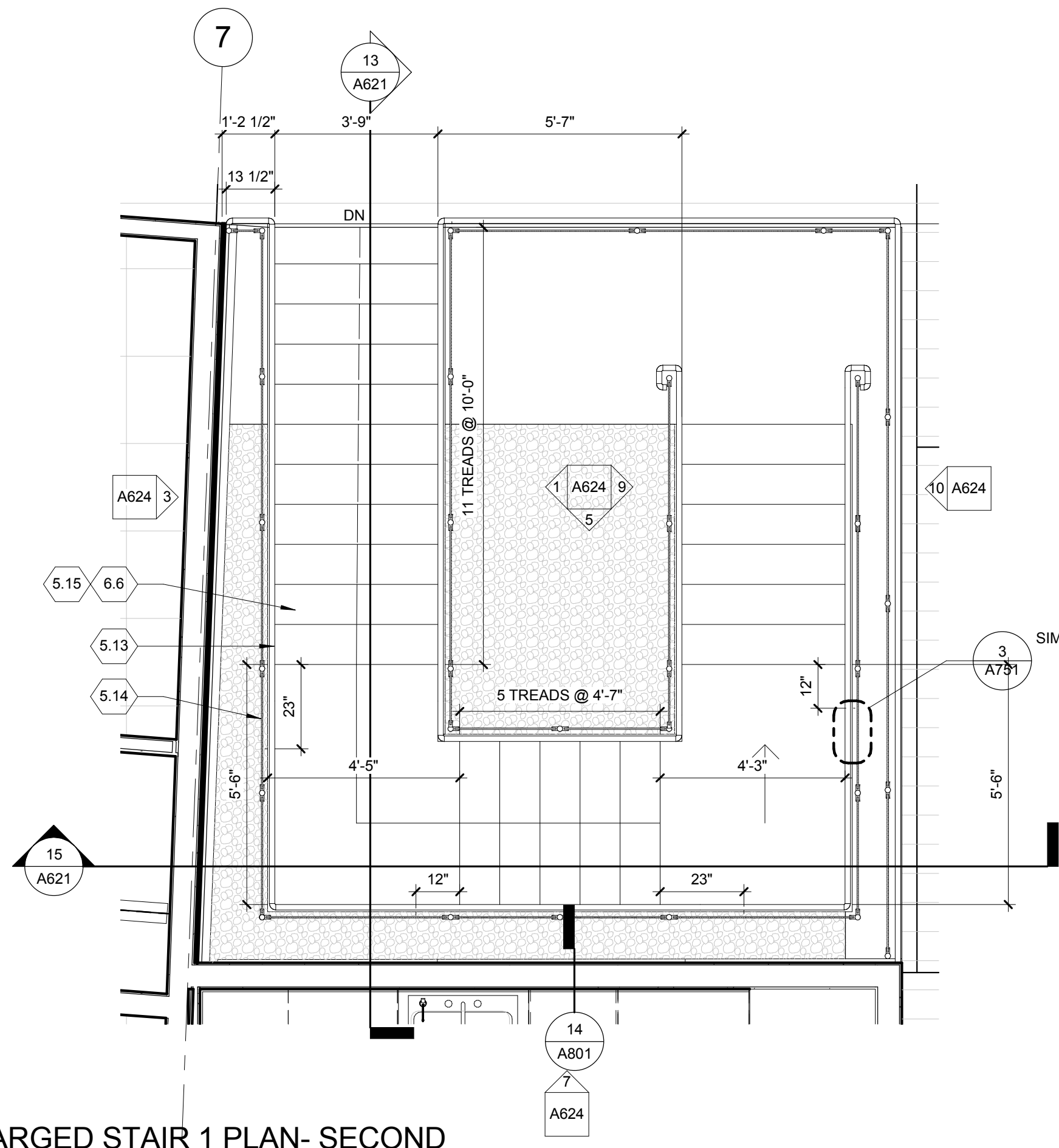
5 ENLARGED STAIR 1 PLAN- FIRST FLOOR

A621 REF: A211 SCALE: 3/8" = 1'-0"



7 ENLARGED STAIR 1 PLAN- SECOND FLOOR

A621 REF: A221 SCALE: 3/8" = 1'-0"



MATERIAL KEYNOTES

DIVISION 03 - CONCRETE

- 3.1 CAST IN PLACE CONCRETE
- 3.2 6" CONC HOUSEKEEPING PAD
- 3.3 VAPOR BARRIER
- 3.4 GRANULAR FILL
- 3.5 CANE DETECTION AREA

DIVISION 05 - METALS

- 5.1 STEEL BEAM
- 5.2 STEEL COLUMN
- 5.3 METAL DECK
- 5.4 STEEL ANGLE
- 5.5 STEEL PLATE
- 5.6 TUBULAR STEEL
- 5.7 STEEL BENT PLATE
- 5.8 STAINLESS STEEL FRAME
- 5.9 OPEN WEB STEEL JOIST
- 5.10 NOT USED
- 5.11 EXT. COLD FORMED METAL FRAMING, SEE STRUCT.
- 5.12 NOT USED
- 5.13 GUARDRAIL
- 5.14 HANDRAIL
- 5.15 METAL FRAMED STAIR
- 5.16 TEEL CHANNEL
- 5.17 VISUALLY CONTRASTING STAINLESS STEEL STRIP, SEE SHEET 1/A002 FOR ACCESSIBILITY REQUIREMENTS

DIVISION 06 - WOOD, PLASTIC & COMPOSITES

- 6.1 WOOD BLOCK/NAILER, PRESSURE TREATED
- 6.2 3/4" PLYWOOD, FIRE RETARDANT TREATED
- 6.3 5/8" GLASS MAT FACED GYP SHEATHING
- 6.4 PLASTIC LAMINATE
- 6.5 SOLID-SURFACING MATERIAL COUNTERTOP
- 6.6 RECYCLED WOOD TREAD

DIVISION 07 - THERMAL & MOISTURE PROTECTION

- 7.1 STAINLESS STEEL FLASHING/COUNTERFLASHING
- 7.2 THERMOPLASTIC MEMBRANE ROOFING
- 7.3 MEMBRANE EDGE FASTENER @ 12" O/C
- 7.4 SAND COATED ROOF WALKWAY
- 7.5 RIGID ROOF INSULATION OF AGED R=30 (UON)
- 7.6 BATT INSULATION R=19
- 7.7 PVC MEMBRANE FLASHING
- 7.8 EXTRUDED ALUM TRIM
- 7.9 ALUM FLASHING
- 7.10 FORMED SHEET SS COPING
- 7.11 BELOW GRADE DAMP/WATERPROOFING
- 7.12 SEALANT WITH BACKER ROD
- 7.13 20 GA GALVANIZED SPLASH PAN
- 7.14 DOWN SPOUT
- 7.15 WATERPROOFING MEMBRANE
- 7.16 INSULATED METAL PANEL CLADDING
- 7.17 ROOF SEISMIC JOINT COVER
- 7.18 EXTERIOR WALL SEISMIC JOINT COVER
- 7.19 INTERIOR WALL SEISMIC JOINT COVER
- 7.20 CEILING SEISMIC JOINT COVER
- 7.21 FIRESTOPPING
- 7.22 SAND COATED ROOF WALKWAY
- 7.23 METAL SPANDREL PANEL (INSULATED)
- 7.24 THERMOPLASTIC MEMBRANE PARAPET FLASHING
- 7.25 THERMOPLASTIC MEMBRANE COVER STRIP, HOT-AIR WELDED
- 7.26 EXTRUDED ALUM BAR W/ FASTENERS @ 12" O.C. MAX
- 7.27 FLOOR SEISMIC JOINT COVER
- 7.28 S.S. PERFORATED RIBBED METAL (20 GA)
- 7.29 METAL PANEL SOFFIT

DIVISION 08 - OPENINGS

- 8.1 DOOR & FRAME
- 8.2 MOTORIZED OPERABLE WINDOW
- 8.3 MANUAL OPERABLE WINDOW
- 8.4 AUTOMATIC DOOR BOTTOM
- 8.5 THRESHOLD
- 8.6 GLAZED ALUM CURTAIN WALL SYSTEM
- 8.7 1" INSULATED GLAZING
- 8.8 FRITTED GLAZING
- 8.9 SPANDREL GLAZING
- 8.10 VISION GLASS (SAFETY WHERE REQUIRED)
- 8.11 RECYCLED GLAZING
- 8.12 AUTOMATIC ENTRANCE DOOR
- 8.13 SKYLIGHT
- 8.14 WEATHERSTRIPPING
- 8.15 MTL SECURITY GATE
- 8.16 DOOR PULL

DIVISION 09 - FINISHES

- 9.1 1/2" GWB TYPE X
- 9.2 5/8" GWB TYPE X
- 9.3 1" GWB SHAFT LINER
- 9.4 20 GA MTL STUD @ 16" O/C
- 9.5 SLOTTED TOP TRACK
- 9.6 METAL STUD TRACK
- 9.7 COLD FORMED FURRING CHANNEL
- 9.8 SHAFT WALL STUD MIN 20 GA @ 24" O/C
- 9.9 FRAMING ANGLE, MIN 20 GA GALV
- 9.10 FURRING CHANNEL MIN 20 GA, SIZE AS NOTED
- 9.11 SHAFT J RUNNER
- 9.12 CERAMIC TILE
- 9.13 REINFORCED MORTAR SETTING BED
- 9.14 SCHEDULED FLOORING
- 9.15 SUSPENDED GYP BOARD CEILING SYSTEM
- 9.16 SCHEDULED WALL BASE
- 9.17 PAINT
- 9.18 5/8" CEMENTITIOUS TILE BACKER BOARD
- 9.19 5/8" GLASS MAT FACED TILE BACKER BOARD
- 9.20 NOT USED
- 9.21 SOUND ATTENUATION BLANKET
- 9.22 ACOUSTICAL INSULATION 3" (UON)
- 9.23 SUSPENDED ACOUSTICAL CEILING

DIVISION 10 - SPECIALTIES

- 10.1 TOILET PARTITION
- 10.2 FIXED SUNSCREEN (BIPV @ BID ALTERNATE)
- 10.3 METAL LOCKER
- 10.4 FIRE EXTINGUISHER CABINET
- 10.5 DOOR STOP
- 10.6 ALUM LIGHT SHELF (BID ALTERNATE)
- 10.7 VINE CABLE SYSTEM
- 10.8 EXTRUDED ALUM LOUVER AIRFOIL
- 10.9 NOT USED
- 10.10 ACCESS FLOORING- 10" HIGH

DIVISION 11 - EQUIPMENT

- 11.1 MOTORIZED PROJECTION SCREEN
- 11.2 PROJECTOR

DIVISION 12 - FURNISHINGS

- 12.1 MOTORIZED WINDOW SHADE
- 12.2 SYSTEM FURNITURE, NIC
- 12.3 ENTRANCE FLOOR MAT & FRAME

DIVISION 14 - EQUIPMENT

- 14.1 HYDRAULIC HOLELESS ELEVATOR, 3500 LB

DIVISION 22 - PLUMBING

- 22.1 ROOF DRAIN
- 22.2 OVERFLOW SCUPPER
- 22.3 VENT THROUGH ROOF
- 22.4 ELECTRIC WATER COOLER
- 22.5 KITCHEN SINK
- 22.6 SERVICE SINK
- 22.7 FLOOR DRAIN
- 22.8 FILTERED WATER SYSTEM FAUCET
- 22.9 DUAL FLUSH TOILET @ WOMEN'S
- 22.10 HIGH EFFICIENCY TOILET @ MEN'S
- 22.11 LOW CONSUMPTION URINAL
- 22.12 COUNTERTOP SINK
- 22.13 ELECTRONIC LAVATORY FAUCET, TYP.
- 22.14 HAND SHOWER SET WITH SLIDE BAR
- 22.15 URINAL ELECTRONIC FLUSH VALVE

DIVISION 23 - HVAC

- 23.1 BOILER FLUE
- 23.2 DUCT
- 23.3 PERIMETER HYDRONIC HEATER
- 23.4 FIRE DAMPER
- 23.5 RADIANT CEILING PANEL
- 23.6 MECHANICAL SHAFT OPENING
- 23.7 RADIANT FLOOR SLAB SYSTEM

SCALE: 1/4" = 1'-0"

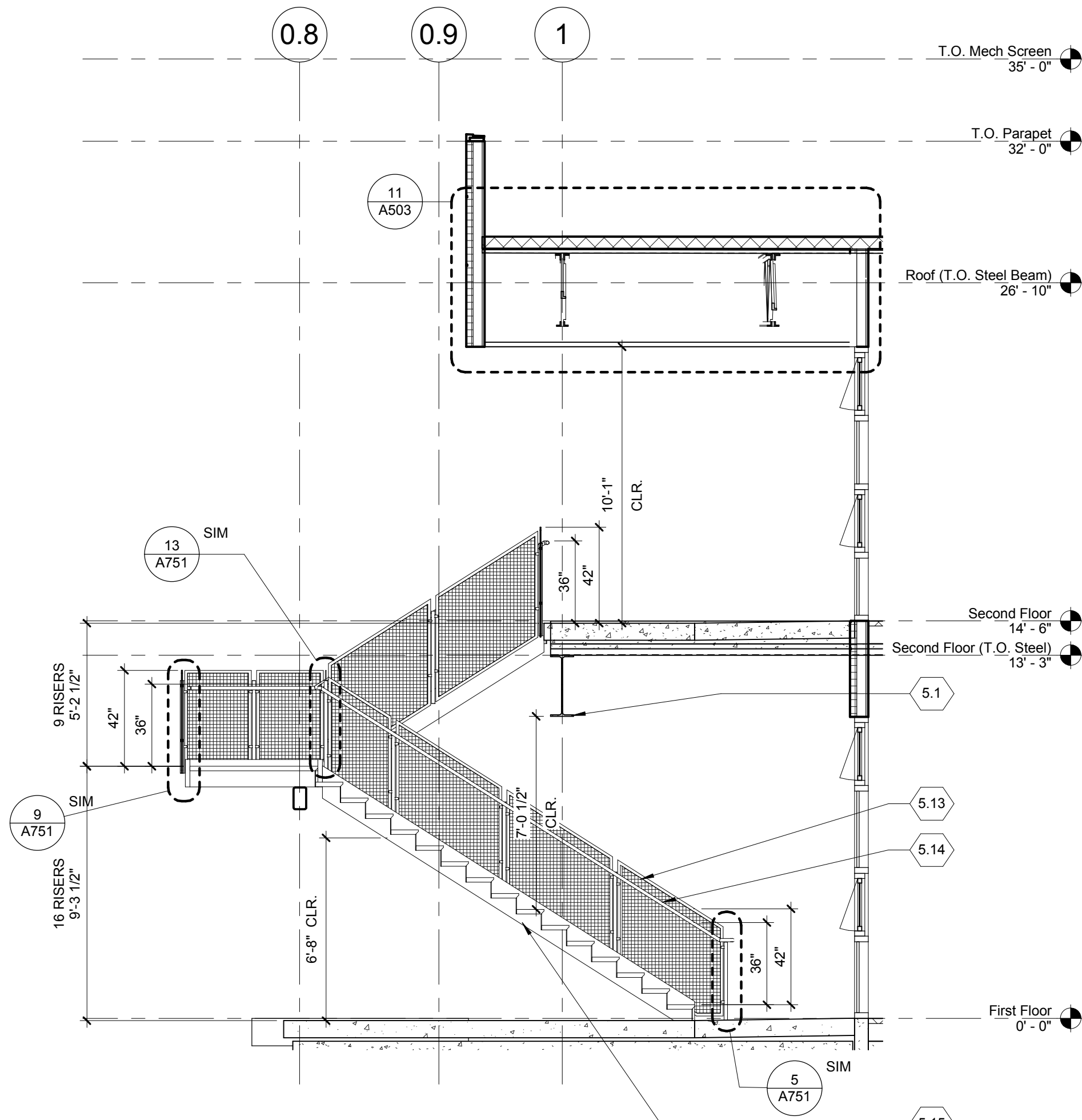
0' 2' 4' 8' 16'

PROJECT STATUS			PRELIMINARY - NOT FOR CONSTRUCTION		
ISSUE	DATE	DESCRIPTION			
1	10/20/2008	30% PRICING			
2	11/07/2008	30% DESIGN REVISION			
3	12/12/2008	60% INTERNAL QA/QC & COST ESTIMATE			
4	12/19/2008	60% PRE-FINAL, NASA REVIEW			
5	01/19/2009	60% FINAL ISSUE TO NASA			
6	02/16/2009	90% QAQC & COST ESTIMATE			
MARK	DATE	DESCRIPTION			
DRAWN	S MOSHGGOU	DATE			
DESIGNED	WM + P	DATE			
CHECKED	R PRADHAN	DATE			
PROJMGJR		DATE			
REQUESTOR		DATE			
R&GA		DATE			
SAFETY		DATE			
SUPERVISOR		DATE			
SIZE	CASE CODE		SCALE	INDEX	SHEET OF
D	25307	A232-0800-			
		A621			

2/16/2009 6:15:16 PM

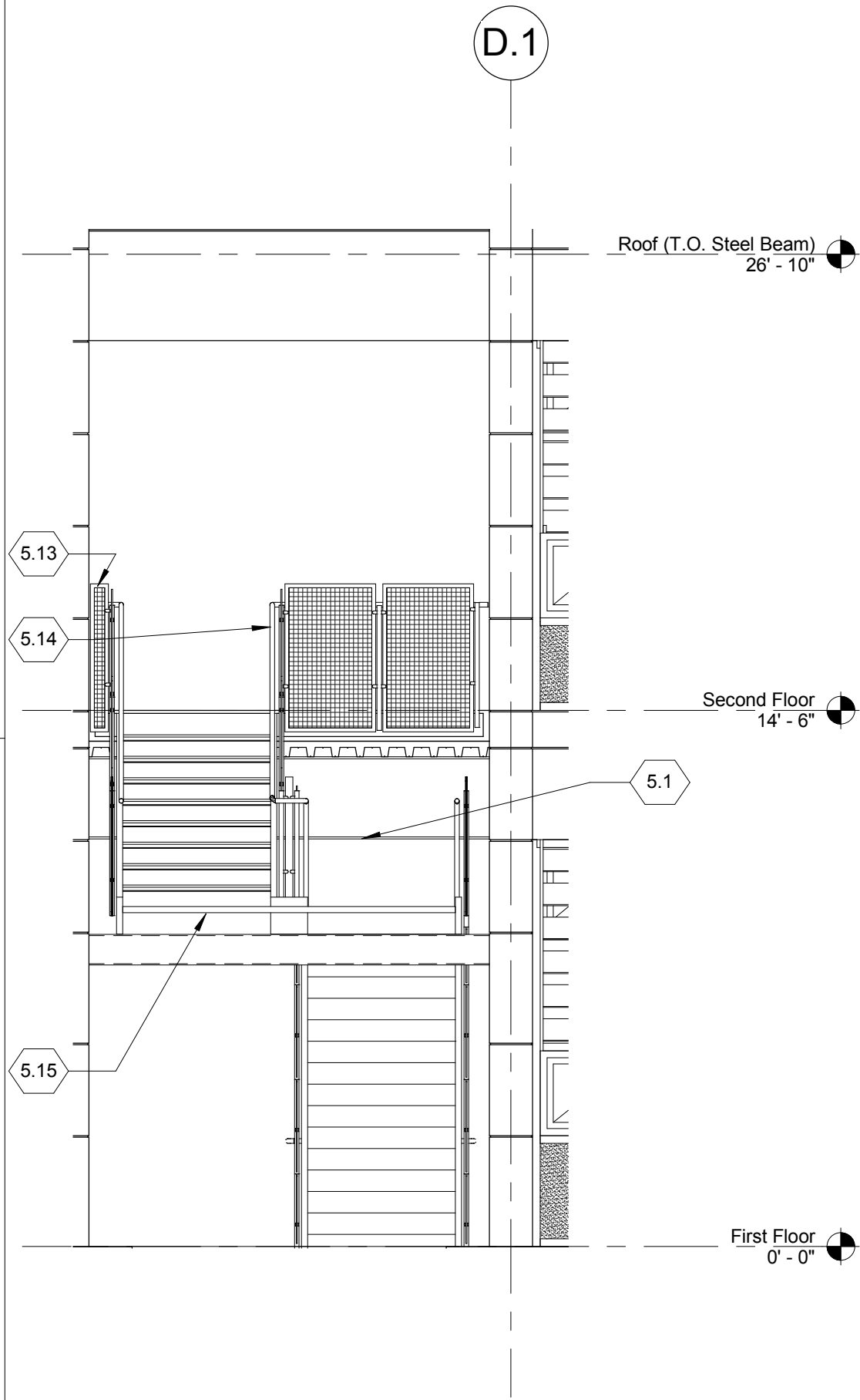
13 STAIR 2 LONGITUDE SECTION

A622 REF: A622 SCALE: 1/4" = 1'-0"



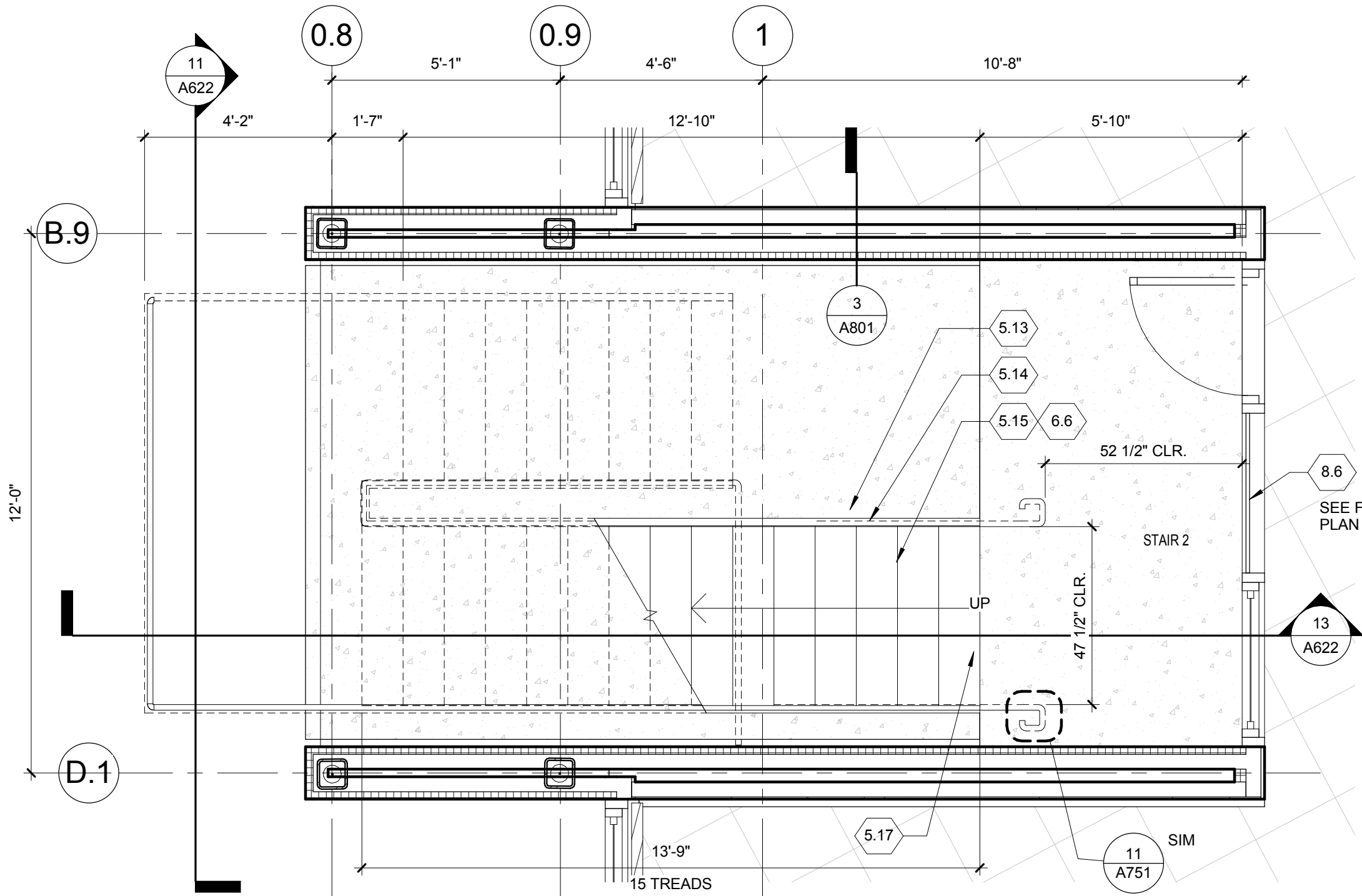
11 STAIR 2 TRANSVERSE SECTION

A622 REF: A622 SCALE: 1/4" = 1'-0"



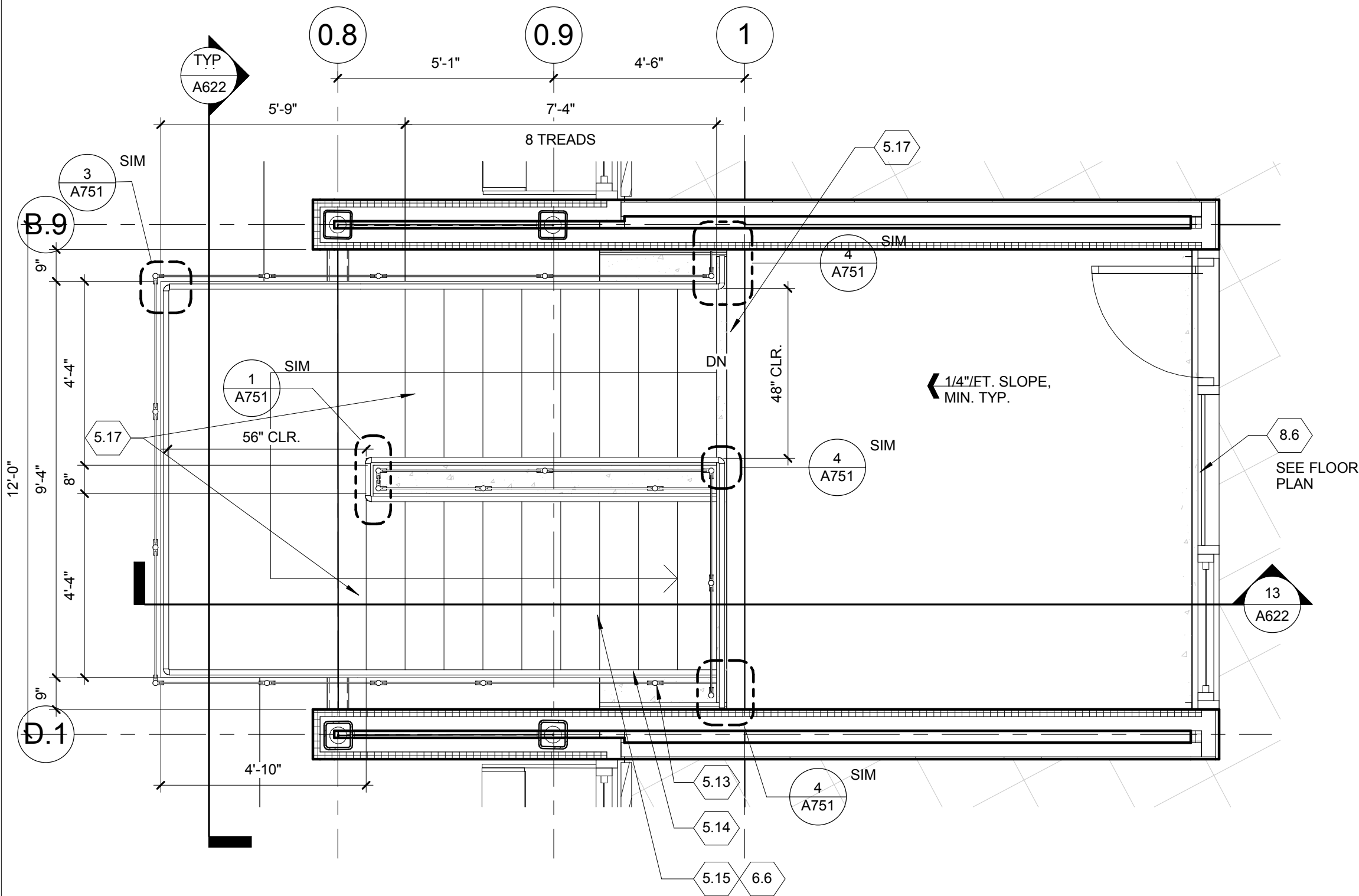
5 ENLARGED STAIR 2 PLAN- FIRST FLOOR

A622 REF: A211 SCALE: 3/8" = 1'-0"



7 ENLARGED STAIR 2 PLAN- SECOND FLOOR

A622 REF: A221 SCALE: 3/8" = 1'-0"



MATERIAL KEYNOTES

DIVISION 03 - CONCRETE

- 3.1 CAST IN PLACE CONCRETE
- 3.2 6" CONC HOUSEKEEPING PAD
- 3.3 VAPOR BARRIER
- 3.4 GRANULAR FILL
- 3.5 CANE DETECTION AREA

DIVISION 05 - METALS

- 5.1 STEEL BEAM
- 5.2 STEEL COLUMN
- 5.3 METAL DECK
- 5.4 STEEL ANGLE
- 5.5 STEEL PLATE
- 5.6 TUBULAR STEEL
- 5.7 STEEL BENT PLATE
- 5.8 STAINLESS STEEL FRAME
- 5.9 OPEN WEB STEEL JOIST
- 5.10 NOT USED
- 5.11 EXT. COLD FORMED METAL FRAMING, SEE STRUCT.
- 5.12 NOT USED
- 5.13 GUARDRAIL
- 5.14 HANDRAIL
- 5.15 METAL FRAMED STAIR
- 5.16 TEEL CHANNEL
- 5.17 VISUALLY CONTRASTING STAINLESS STEEL STRIP, SEE SHEET 1/A002 FOR ACCESSIBILITY REQUIREMENTS

DIVISION 06 - WOOD, PLASTIC & COMPOSITES

- 6.1 WOOD BLOCK/NAILER, PRESSURE TREATED
- 6.2 3/4" PLYWOOD, FIRE RETARDANT TREATED
- 6.3 5/8" GLASS MAT FACED GYP SHEATHING
- 6.4 PLASTIC LAMINATE
- 6.5 SOLID-SURFACING MATERIAL COUNTERTOP
- 6.6 RECYCLED WOOD TREAD

DIVISION 07 - THERMAL & MOISTURE PROTECTION

- 7.1 STAINLESS STEEL FLASHING/COUNTERFLASHING
- 7.2 THERMOPLASTIC MEMBRANE ROOFING
- 7.3 MEMBRANE EDGE FASTENER @ 12" O/C
- 7.4 SAND COATED ROOF WALKWAY
- 7.5 RIGID ROOF INSULATION OF AGED R=30 (UON)
- 7.6 BATT INSULATION R=19
- 7.7 PVC MEMBRANE FLASHING
- 7.8 EXTRUDED ALUM TRIM
- 7.9 ALUM FLASHING
- 7.10 FORMED SHEET SS COPING
- 7.11 BELOW GRADE DAMP/WATERPROOFING
- 7.12 SEALANT WITH BACKER ROD
- 7.13 20 GA GALVANIZED SPLASH PAN
- 7.14 DOWN SPOUT
- 7.15 WATERPROOFING MEMBRANE
- 7.16 INSULATED METAL PANEL CLADDING
- 7.17 ROOF SEISMIC JOINT COVER
- 7.18 EXTERIOR WALL SEISMIC JOINT COVER
- 7.19 INTERIOR WALL SEISMIC JOINT COVER
- 7.20 CEILING SEISMIC JOINT COVER
- 7.21 FIRES TOPPING
- 7.22 SAND COATED ROOF WALKWAY
- 7.23 METAL SPANDREL PANEL (INSULATED)
- 7.24 THERMOPLASTIC MEMBRANE PARAPET FLASHING
- 7.25 THERMOPLASTIC MEMBRANE COVER STRIP, HOT-AIR WELDED
- 7.26 EXTRUDED ALUM BAR W/ FASTENERS @ 12" O.C. MAX
- 7.27 FLOOR SEISMIC JOINT COVER
- 7.28 S.S. PERFORATED RIBBED METAL (20 GA)
- 7.29 METAL PANEL SOFFIT

DIVISION 08 - OPENINGS

- 8.1 DOOR & FRAME
- 8.2 MOTORIZED OPERABLE WINDOW
- 8.3 MANUAL OPERABLE WINDOW
- 8.4 AUTOMATIC DOOR BOTTOM
- 8.5 THRESHOLD
- 8.6 GLAZED ALUM CURTAIN WALL SYSTEM
- 8.7 1" INSULATED GLAZING
- 8.8 FRITTED GLAZING
- 8.9 SPANDREL GLAZING
- 8.10 VISION GLASS (SAFETY WHERE REQUIRED)
- 8.11 RECYCLED GLAZING
- 8.12 AUTOMATIC ENTRANCE DOOR
- 8.13 SKYLIGHT
- 8.14 WEATHERSTRIPPING
- 8.15 MTL SECURITY GATE
- 8.16 DOOR PULL

DIVISION 09 - FINISHES

- 9.1 1/2" GWB TYPE X
- 9.2 5/8" GWB TYPE X
- 9.3 1" GWB SHAFT LINER
- 9.4 20 GA MTL STUD @ 16" O/C
- 9.5 SLOTTED TOP TRACK
- 9.6 METAL STUD TRACK
- 9.7 COLD FORMED FURRING CHANNEL
- 9.8 SHAFT WALL STUD MIN 20 GA @ 24" O/C
- 9.9 FRAMING ANGLE, MIN 20 GA GALV
- 9.10 FURRING CHANNEL MIN 20 GA, SIZE AS NOTED
- 9.11 SHAFT J RUNNER
- 9.12 CERAMIC TILE
- 9.13 REINFORCED MORTAR SETTING BED
- 9.14 SCHEDULED FLOORING
- 9.15 SUSPENDED GYP BOARD CEILING SYSTEM
- 9.16 SCHEDULED WALL BASE
- 9.17 PAINT
- 9.18 5/8" CEMENTITIOUS TILE BACKER BOARD
- 9.19 5/8" GLASS MAT FACED TILE BACKER BOARD
- 9.20 NOT USED
- 9.21 SOUND ATTENUATION BLANKET
- 9.22 ACOUSTICAL INSULATION 3" (UON)
- 9.23 SUSPENDED ACOUSTICAL CEILING

DIVISION 10 - SPECIALTIES

- 10.1 TOILET PARTITION
- 10.2 FIXED SUNSCREEN (BIPV @ BID ALTERNATE)
- 10.3 METAL LOCKER
- 10.4 FIRE EXTINGUISHER CABINET
- 10.5 DOOR STOP
- 10.6 ALUM LIGHT SHELF (BID ALTERNATE)
- 10.7 VINE CABLE SYSTEM
- 10.8 EXTRUDED ALUM LOUVER AIRFOIL
- 10.9 NOT USED
- 10.10 ACCESS FLOORING- 10" HIGH

DIVISION 11 - EQUIPMENT

- 11.1 MOTORIZED PROJECTION SCREEN
- 11.2 PROJECTOR

DIVISION 12 - FURNISHINGS

- 12.1 MOTORIZED WINDOW SHADE
- 12.2 SYSTEM FURNITURE, NIC
- 12.3 ENTRANCE FLOOR MAT & FRAME

DIVISION 14 - EQUIPMENT

- 14.1 HYDRAULIC HOLELESS ELEVATOR, 3500 LB

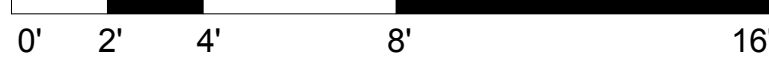
DIVISION 22 - PLUMBING

- 22.1 ROOF DRAIN
- 22.2 OVERFLOW SCUPPER
- 22.3 VENT THROUGH ROOF
- 22.4 ELECTRIC WATER COOLER
- 22.5 KITCHEN SINK
- 22.6 SERVICE SINK
- 22.7 FLOOR DRAIN
- 22.8 FILTERED WATER SYSTEM FAUCET
- 22.9 DUAL FLUSH TOILET @ WOMEN'S
- 22.10 HIGH EFFICIENCY TOILET @ MEN'S
- 22.11 LOW CONSUMPTION URINAL
- 22.12 COUNTERTOP SINK
- 22.13 ELECTRONIC LAVATORY FAUCET, TYP.
- 22.14 HAND SHOWER SET WITH SLIDE BAR
- 22.15 URINAL ELECTRONIC FLUSH VALVE

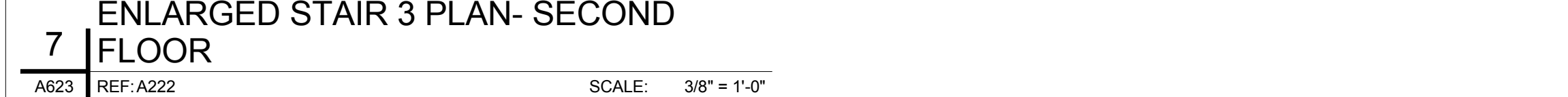
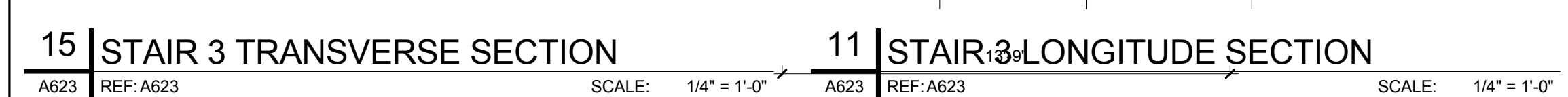
DIVISION 23 - HVAC

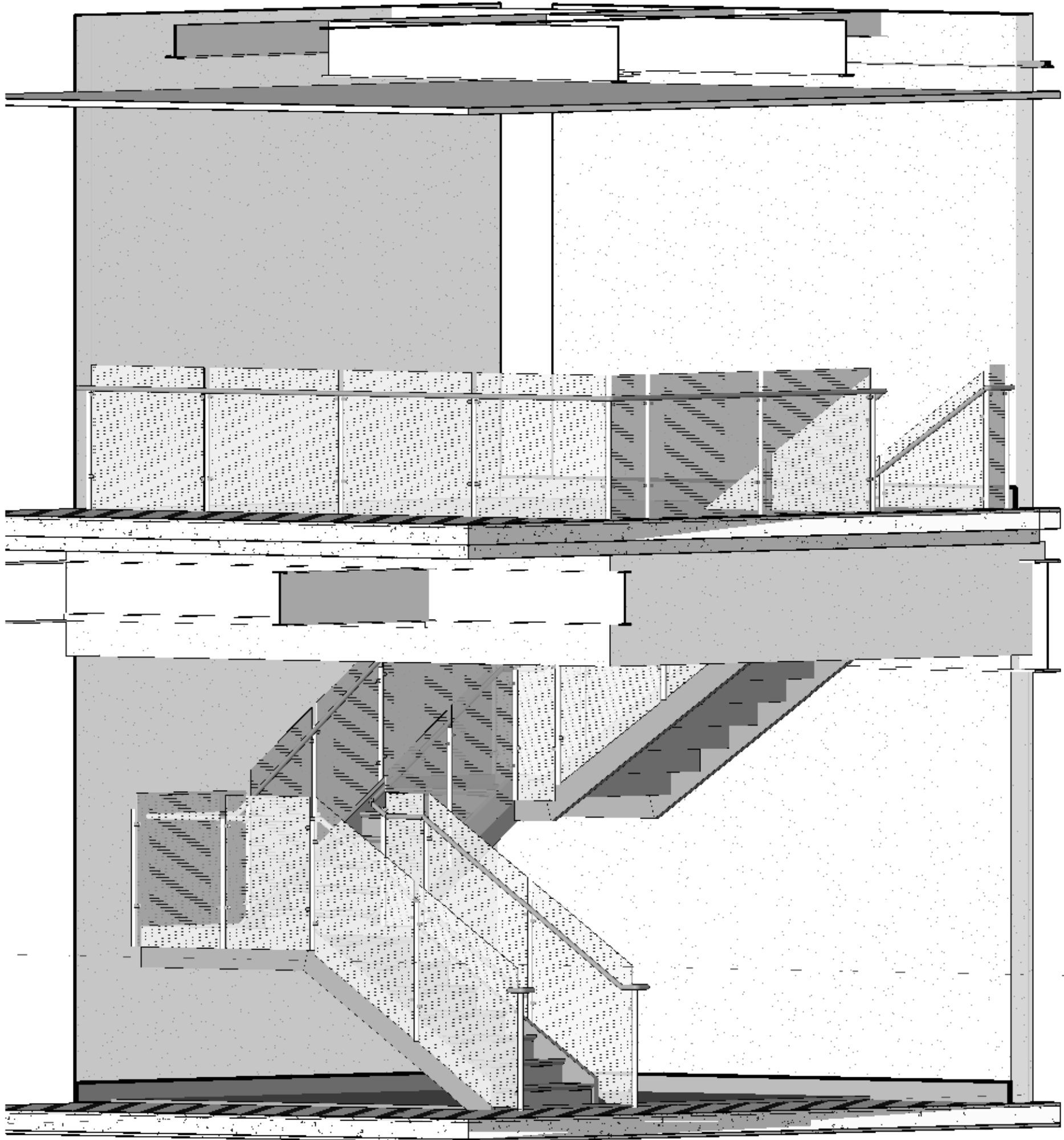
- 23.1 BOILER FLUE
- 23.2 DUCT
- 23.3 PERIMETER HYDRONIC HEATER
- 23.4 FIRE DAMPER
- 23.5 RADIANT CEILING PANEL
- 23.6 MECHANICAL SHAFT OPENING
- 23.7 RADIANT FLOOR SLAB SYSTEM

SCALE: 1/4" = 1'-0"



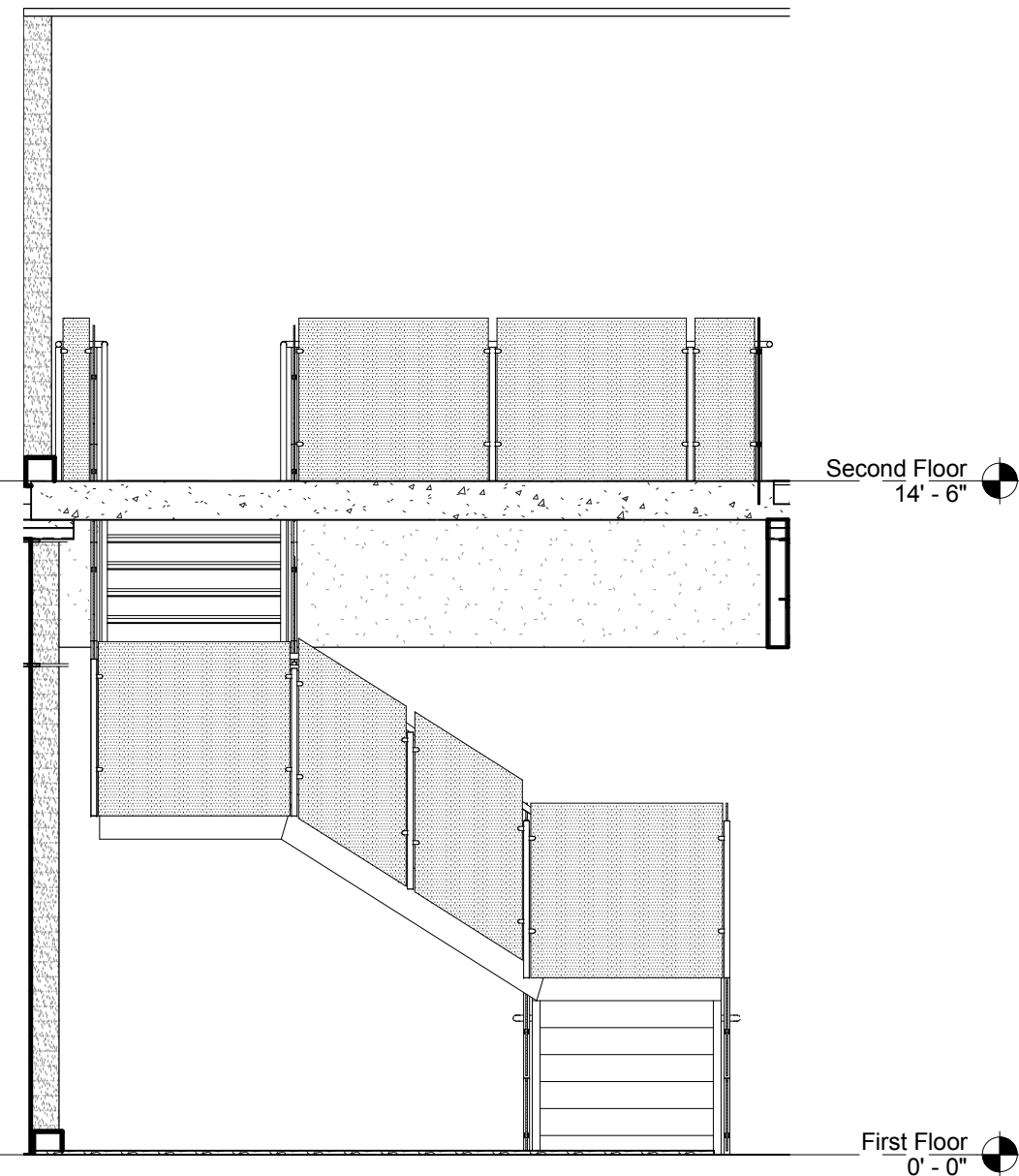
PROJECT STATUS		
PRELIMINARY - NOT FOR CONSTRUCTION		
ISSUE	DATE	DESCRIPTION
1	10/20/2008	30% PRICING
2	11/07/2008	30% DESIGN REVISION
3	12/12/2008	60% INTERNAL QA/QC & COST ESTIMATE
4	12/19/2008	60% PRE-FINAL, NASA REVIEW
5	01/19/2009	60% FINAL ISSUE TO NASA
6	02/16/2009	90% QAQC & COST ESTIMATE
MARK	DATE	DESCRIPTION
DRAWN	S MOSHGGOU	
DESIGNED	WM+P	
CHECKED	R PRADHAN	
PROJMG		
REQUESTOR		
R&GA		
SAFETY		
SUPERVISOR		
SIZE	CASE CODE	REV
D	25307	A622
SCALE	INDEX	SHEET OF





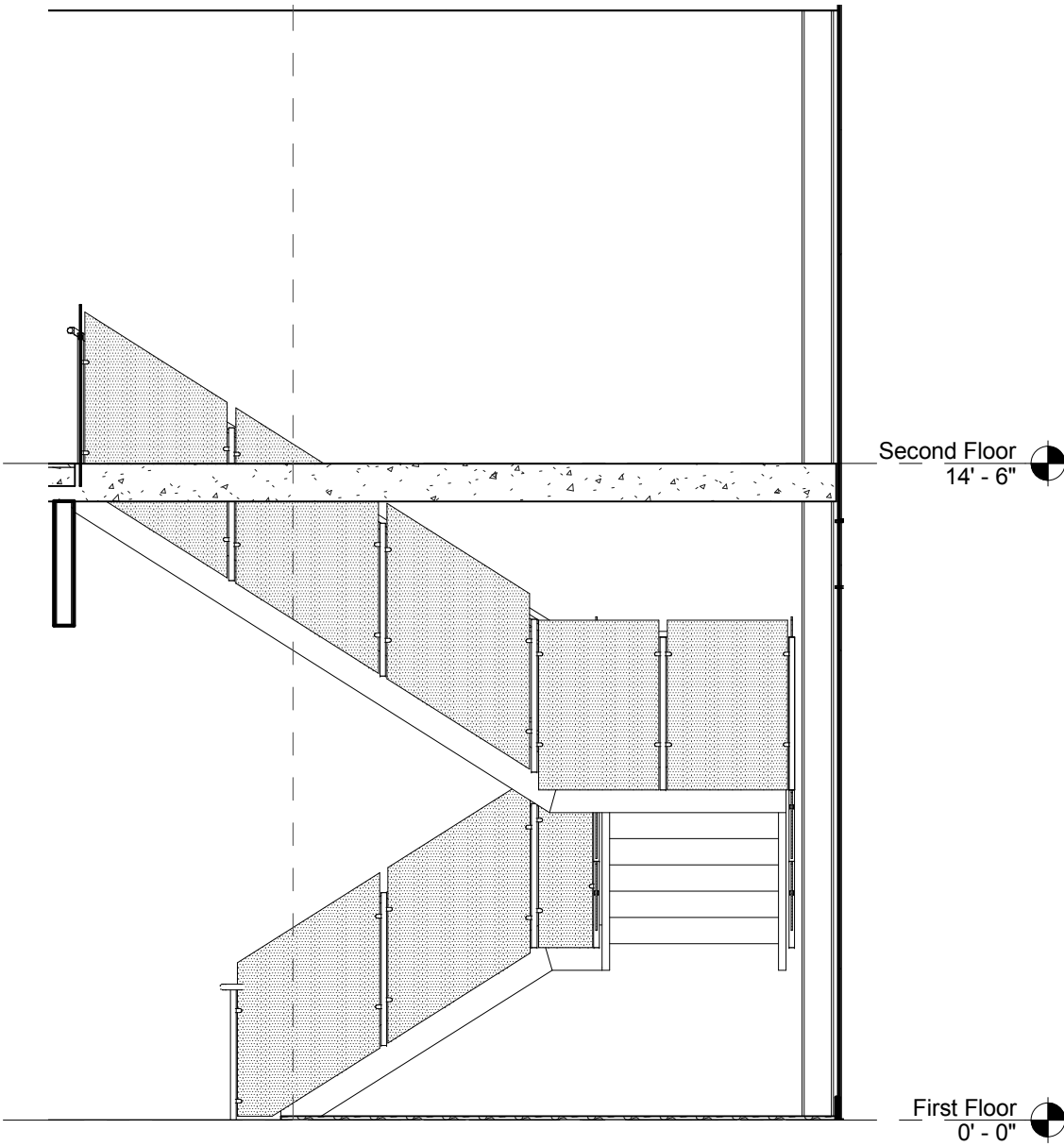
15 | INTERIOR STAIR 1 SCOPE

A624 REF: SCALE:



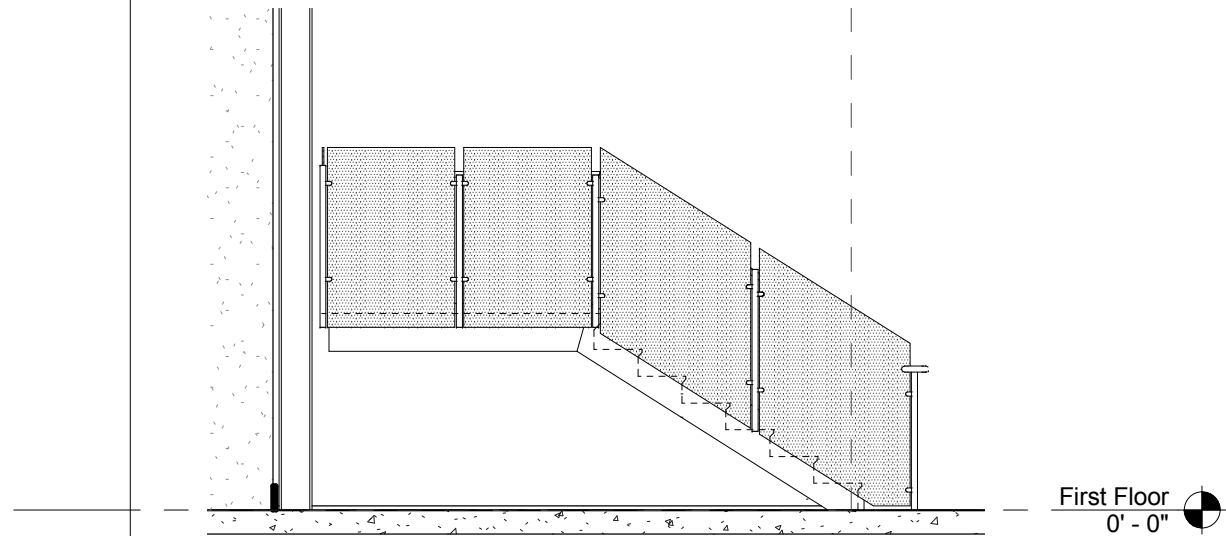
7 | STAIR 1 - SOUTH ELEVATION OUTER

A624 REF: A621 SCALE: 1/4" = 1'-0"



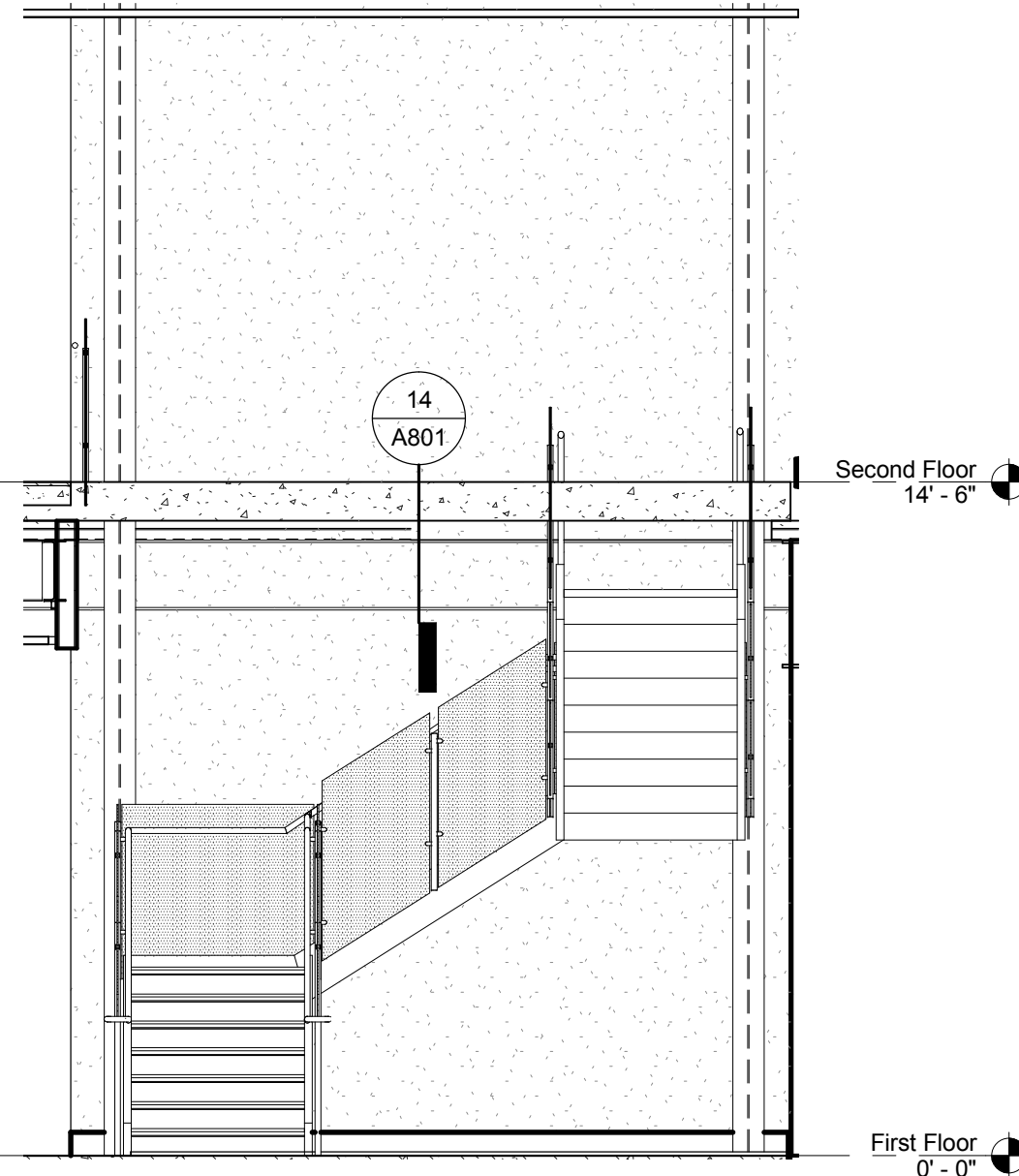
3 | STAIR 1 - WEST ELEVATION OUTER

A624 REF: A613 SCALE: 1/4" = 1'-0"



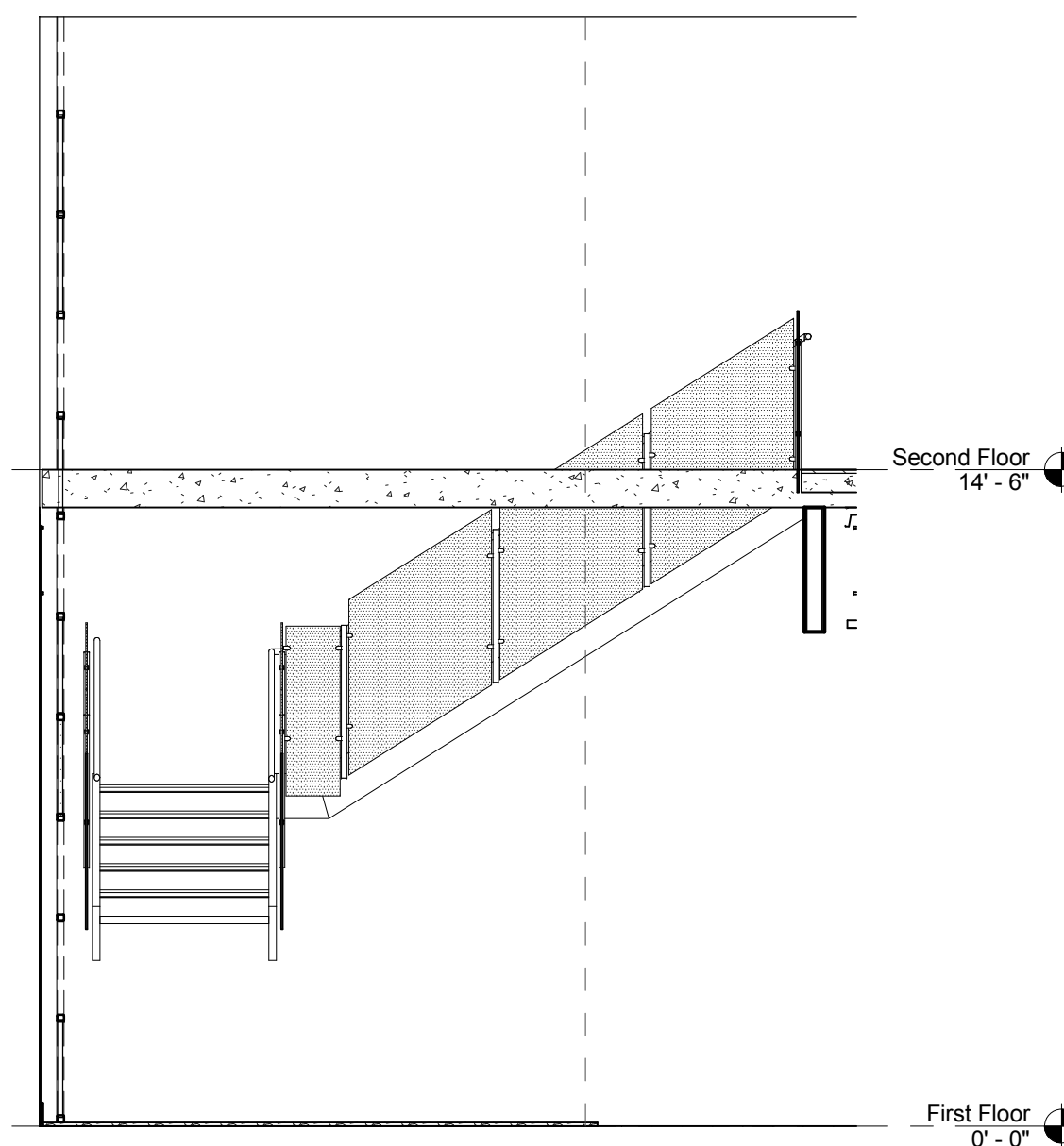
10 | STAIR 1 - EAST ELEVATION OUTER

A624 REF: A613 SCALE: 1/4" = 1'-0"



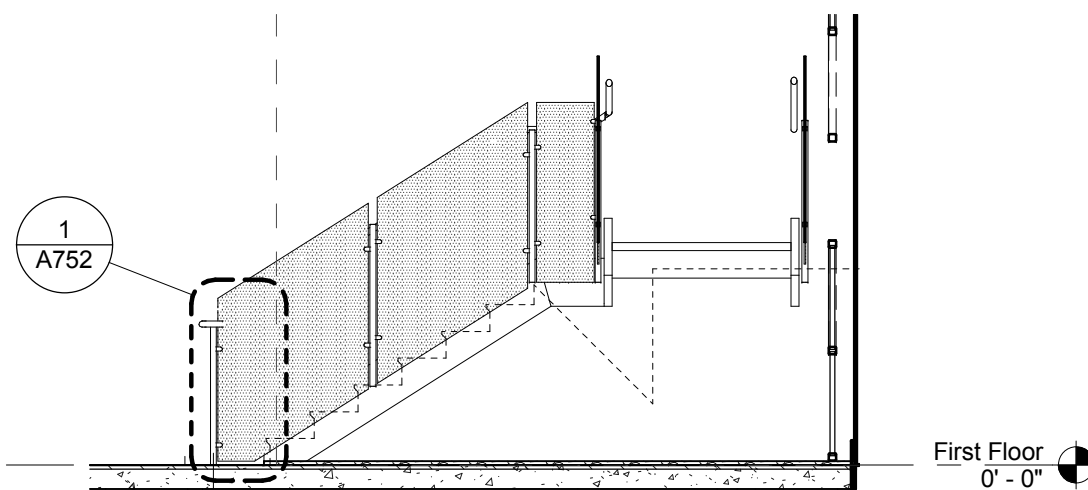
5 | STAIR 1 - NORTH ELEVATION INNER

A624 REF: A621 SCALE: 1/4" = 1'-0"



1 | STAIR 1 - EAST ELEVATION INNER

A624 REF: A613 SCALE: 1/4" = 1'-0"



9 | STAIR 1 - WEST ELEVATION INNER

A624 REF: A613 SCALE: 1/4" = 1'-0"

MATERIAL KEYNOTES

- DIVISION 03 - CONCRETE**
- 3.1 CAST IN PLACE CONCRETE
 - 3.2 6" CONC HOUSEKEEPING PAD
 - 3.3 VAPOR BARRIER
 - 3.4 GRANULAR FILL
 - 3.5 CANE DETECTION AREA
- DIVISION 05 - METALS**
- 5.1 STEEL BEAM
 - 5.2 STEEL COLUMN
 - 5.3 METAL DECK
 - 5.4 STEEL ANGLE
 - 5.5 STEEL PLATE
 - 5.6 TUBULAR STEEL
 - 5.7 STEEL BENT PLATE
 - 5.8 STAINLESS STEEL FRAME
 - 5.9 OPEN WEB STEEL JOIST
 - 5.10 NOT USED
 - 5.11 EXT. COLD FORMED METAL FRAMING, SEE STRUCT.
 - 5.12 NOT USED
 - 5.13 GUARDRAIL
 - 5.14 HANDRAIL
 - 5.15 METAL FRAMED STAIR
 - 5.16 TEEL CHANNEL
 - 5.17 VISUALLY CONTRASTING STAINLESS STEEL STRIP, SEE SHEET 1/A002 FOR ACCESSIBILITY REQUIREMENTS

- DIVISION 06 - WOOD, PLASTIC & COMPOSITES**
- 6.1 WOOD BLOCK/NAILER, PRESSURE TREATED
 - 6.2 3/4" PLYWOOD, FIRE RETARDANT TREATED
 - 6.3 5/8" GLASS MAT FACED GYP SHEATHING
 - 6.4 PLASTIC LAMINATE
 - 6.5 SOLID-SURFACING MATERIAL COUNTERTOP
 - 6.6 RECYCLED WOOD TREAD

- DIVISION 07 - THERMAL & MOISTURE PROTECTION**
- 7.1 STAINLESS STEEL FLASHING/COUNTERFLASHING
 - 7.2 THERMOPLASTIC MEMBRANE ROOFING
 - 7.3 MEMBRANE EDGE FASTENER @ 12" O/C
 - 7.4 SAND COATED ROOF WALKWAY
 - 7.5 RIGID ROOF INSULATION OF AGED R=30 (UON)
 - 7.6 BATT INSULATION R=19
 - 7.7 PVC MEMBRANE FLASHING
 - 7.8 EXTRUDED ALUM TRIM
 - 7.9 ALUM FLASHING
 - 7.10 FORMED SHEET SS COPING
 - 7.11 BELOW GRADE DAMP/WATERPROOFING
 - 7.12 SEALANT WITH BACKER ROD
 - 7.13 20 GA GALVANIZED SPLASH PAN
 - 7.14 DOWN SPOUT
 - 7.15 WATERPROOFING MEMBRANE
 - 7.16 INSULATED METAL PANEL CLADDING
 - 7.17 ROOF SEISMIC JOINT COVER
 - 7.18 EXTERIOR WALL SEISMIC JOINT COVER
 - 7.19 INTERIOR WALL SEISMIC JOINT COVER
 - 7.20 CEILING SEISMIC JOINT COVER
 - 7.21 FIRESTOPPING
 - 7.22 SAND COATED ROOF WALKWAY
 - 7.23 METAL SPANDREL PANEL (INSULATED)
 - 7.24 THERMOPLASTIC MEMBRANE PARAPET FLASHING
 - 7.25 THERMOPLASTIC MEMBRANE COVER STRIP, HOT-AIR WELDED
 - 7.26 EXTRUDED ALUM BAR W/ FASTENERS @ 12" O.C. MAX
 - 7.27 FLOOR SEISMIC JOINT COVER
 - 7.28 S.S. PERFORATED RIBBED METAL (20 GA)
 - 7.29 METAL PANEL SOFFIT

- DIVISION 08 - OPENINGS**
- 8.1 DOOR & FRAME
 - 8.2 MOTORIZED OPERABLE WINDOW
 - 8.3 MANUAL OPERABLE WINDOW
 - 8.4 AUTOMATIC DOOR BOTTOM
 - 8.5 THRESHOLD
 - 8.6 GLAZED ALUM CURTAIN WALL SYSTEM
 - 8.7 1" INSULATED GLAZING
 - 8.8 FRITTED GLAZING
 - 8.9 SPANDREL GLAZING
 - 8.10 VISION GLASS (SAFETY WHERE REQUIRED)
 - 8.11 RECYCLED GLAZING
 - 8.12 AUTOMATIC ENTRANCE DOOR
 - 8.13 SKYLIGHT
 - 8.14 WEATHERSTRIPPING
 - 8.15 MTL SECURITY GATE
 - 8.16 DOOR PULL

- DIVISION 09 - FINISHES**
- 9.1 1/2" GWB TYPE X
 - 9.2 5/8" GWB TYPE X
 - 9.3 1" GWB SHAFT LINER
 - 9.4 20 GA MTL STUD @ 16" O/C
 - 9.5 SLOTTED TOP TRACK
 - 9.6 METAL STUD TRACK
 - 9.7 COLD FORMED FURRING CHANNEL
 - 9.8 SHAFT WALL STUD MIN 20 GA @ 24" O/C
 - 9.9 FRAMING ANGLE, MIN 20 GA GALV
 - 9.10 FURRING CHANNEL MIN 20 GA, SIZE AS NOTED
 - 9.11 SHAFT J RUNNER
 - 9.12 CERAMIC TILE
 - 9.13 REINFORCED MORTAR SETTING BED
 - 9.14 SCHEDULED FLOORING
 - 9.15 SUSPENDED GYP BOARD CEILING SYSTEM
 - 9.16 SCHEDULED WALL BASE
 - 9.17 PAINT
 - 9.18 5/8" CEMENTITIOUS TILE BACKER BOARD
 - 9.19 5/8" GLASS MAT FACED TILE BACKER BOARD
 - 9.20 NOT USED
 - 9.21 SOUND ATTENUATION BLANKET
 - 9.22 ACOUSTICAL INSULATION 3" (UON)
 - 9.23 SUSPENDED ACOUSTICAL CEILING

- DIVISION 10 - SPECIALTIES**
- 10.1 TOILET PARTITION
 - 10.2 FIXED SUNSCREEN (BIPV @ BID ALTERNATE)
 - 10.3 METAL LOCKER
 - 10.4 FIRE EXTINGUISHER CABINET
 - 10.5 DOOR STOP
 - 10.6 ALUM LIGHT SHELF (BID ALTERNATE)
 - 10.7 VINE CABLE SYSTEM
 - 10.8 EXTRUDED ALUM LOUVER AIRFOIL
 - 10.9 NOT USED
 - 10.10 ACCESS FLOORING- 10" HIGH

- DIVISION 11 - EQUIPMENT**
- 11.1 MOTORIZED PROJECTION SCREEN
 - 11.2 PROJECTOR

- DIVISION 12 - FURNISHINGS**
- 12.1 MOTORIZED WINDOW SHADE
 - 12.2 SYSTEM FURNITURE, NIC
 - 12.3 ENTRANCE FLOOR MAT & FRAME


- DIVISION 14 - EQUIPMENT**
- 14.1 HYDRAULIC HOLELESS ELEVATOR, 3500 LB

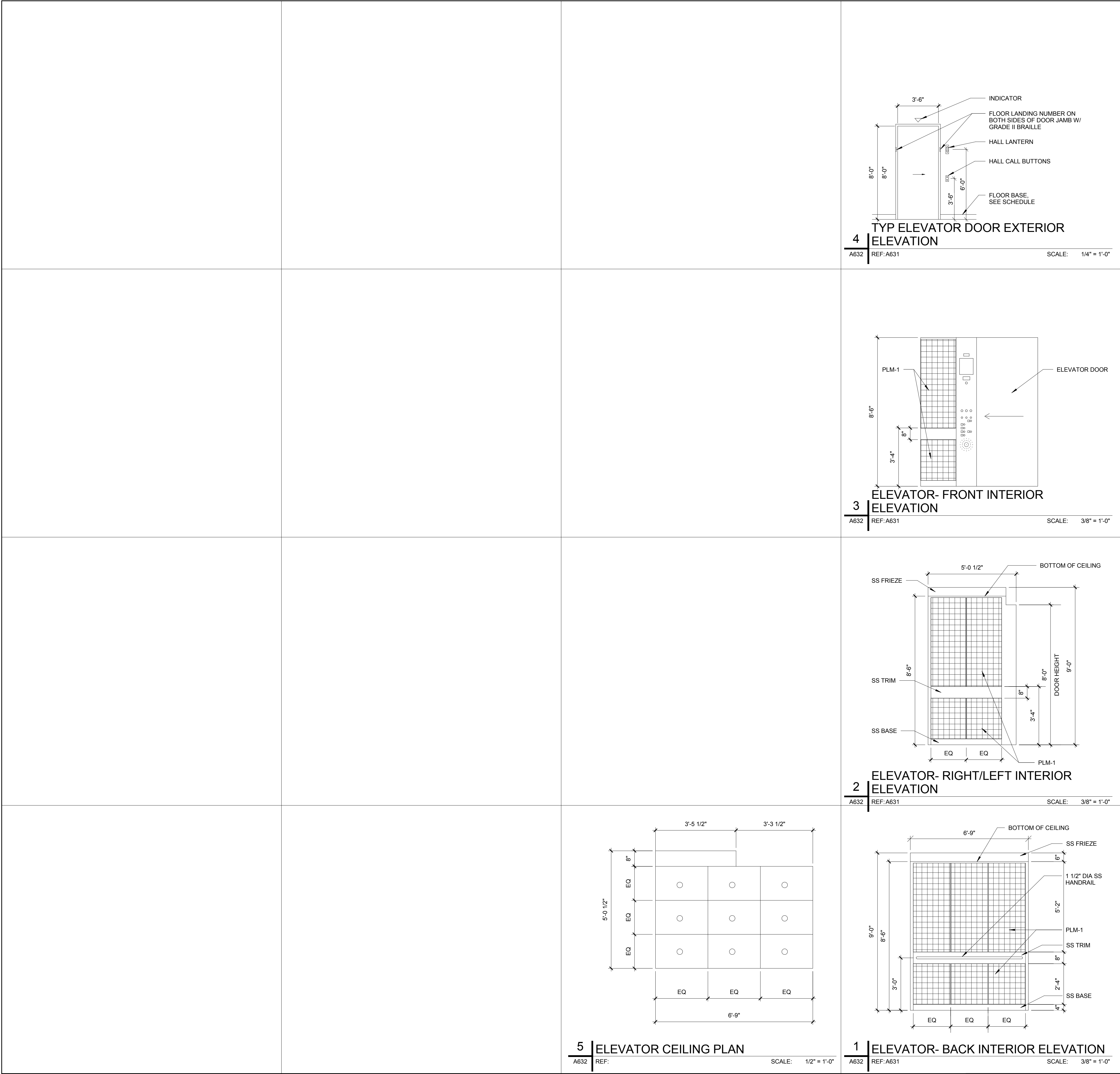
- DIVISION 22 - PLUMBING**
- 22.1 ROOF DRAIN
 - 22.2 OVERFLOW SCUPPER
 - 22.3 VENT THROUGH ROOF
 - 22.4 ELECTRIC WATER COOLER
 - 22.5 KITCHEN SINK
 - 22.6 SERVICE SINK
 - 22.7 FLOOR DRAIN
 - 22.8 FILTERED WATER SYSTEM FAUCET
 - 22.9 DUAL FLUSH TOILET @ WOMEN'S
 - 22.10 HIGH EFFICIENCY TOILET @ MEN'S
 - 22.11 LOW CONSUMPTION URINAL
 - 22.12 COUNTERTOP SINK
 - 22.13 ELECTRONIC LAVATORY FAUCET, TYP.
 - 22.14 HAND SHOWER SET WITH SLIDE BAR
 - 22.15 URINAL ELECTRONIC FLUSH VALVE

- DIVISION 23 - HVAC**
- 23.1 BOILER FLUE
 - 23.2 DUCT
 - 23.3 PERIMETER HYDRONIC HEATER
 - 23.4 FIRE DAMPER
 - 23.5 RADIANT CEILING PANEL
 - 23.6 MECHANICAL SHAFT OPENING
 - 23.7 RADIANT FLOOR SLAB SYSTEM

PRELIMINARY - NOT FOR CONSTRUCTION

ISSUE	DATE	DESCRIPTION
1	10/20/2008	30% PRICING
2	11/07/2008	30% DESIGN REVISION
3	12/12/2008	60% INTERNAL QA/QC & COST ESTIMATE
4	12/19/2008	60% PRE-FINAL, NASA REVIEW
5	01/19/2009	60% FINAL ISSUE TO NASA
6	02/16/2009	90% QAQC & COST ESTIMATE

MARK	DATE	DESCRIPTION				
DRAWN	S MOSHGGOU	DATE	<div><div>Ames Research Center Moffet Field, California</div></div>			
DESIGNED	WM+P	DATE				
CHECKED	R PRADHAN	DATE	N232 COLLABORATIVE SUPPORT FACILITY			
PROJMG		DATE	STAIR 1 - ELEVATIONS			
REQUESTOR		DATE				
R&GA		DATE				
SAFETY		DATE				
SUPERVISOR		DATE				
			SIZE	CAGE CODE		REV
			D	25307	A232-0800-	A624
			SCALE	INDEX	SHEET	OF



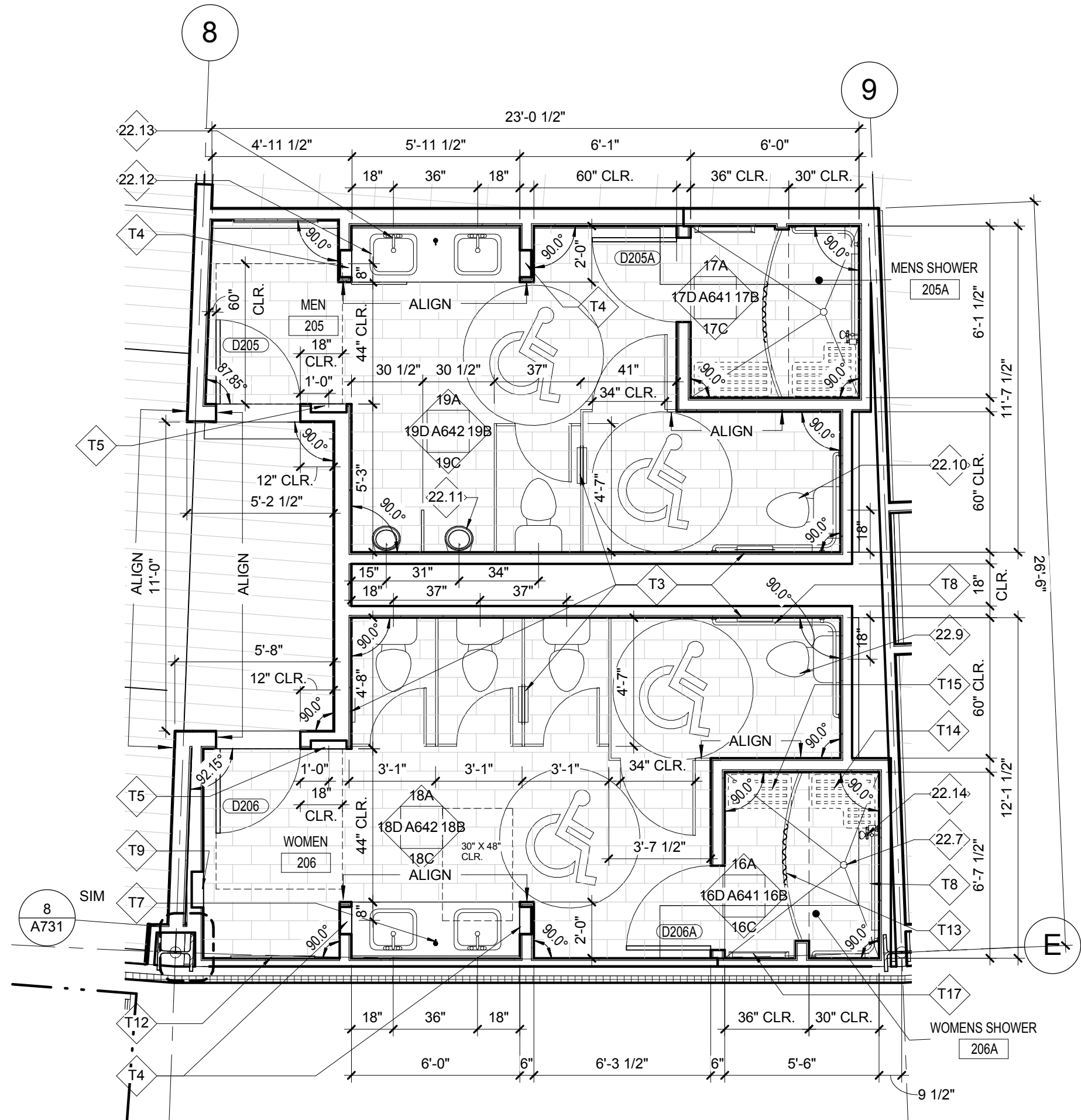
MATERIAL KEYNOTES

DIVISION 03 - CONCRETE		DIVISION 10 - SPECIALTIES	
3.1	CAST IN PLACE CONCRETE	10.1	TOILET PARTITION
3.2	6" CONC HOUSEKEEPING PAD	10.2	FIXED SUNSCREEN (BIPV @ BID ALTERNATE)
3.3	VAPOR BARRIER	10.3	METAL LOCKER
3.4	GRANULAR FILL	10.4	FIRE EXTINGUISHER CABINET
3.5	CANE DETECTION AREA	10.5	DOOR STOP
DIVISION 05 - METALS		10.6	ALUM LIGHT SHELF (BID ALTERNATE)
5.1	STEEL BEAM	10.7	VINE CABLE SYSTEM
5.2	STEEL COLUMN	10.8	EXTRUDED ALUM LOUVER AIRFOIL
5.3	METAL DECK	10.9	NOT USED
5.4	STEEL ANGLE	10.10	ACCESS FLOORING- 10" HIGH
5.5	STEEL PLATE	DIVISION 11 - EQUIPMENT	
5.6	TUBULAR STEEL	11.1	MOTORIZED PROJECTION SCREEN
5.7	STEEL BENT PLATE	11.2	PROJECTOR
5.8	STAINLESS STEEL FRAME	DIVISION 12 - FURNISHINGS	
5.9	OPEN WEB STEEL JOIST	12.1	MOTORIZED WINDOW SHADE
5.10	NOT USED	12.2	SYSTEM FURNITURE, NIC
5.11	EXT. COLD FORMED METAL FRAMING, SEE STRUCT.	12.3	ENTRANCE FLOOR MAT & FRAME
5.12	NOT USED	DIVISION 14 - EQUIPMENT	
5.13	GUARDRAIL	14.1	HYDRAULIC HOLELESS ELEVATOR, 3500 LB
5.14	HANDRAIL	DIVISION 22 - PLUMBING	
5.15	METAL FRAMED STAIR	22.1	ROOF DRAIN
5.16	TEEL CHANNEL	22.2	OVERFLOW SCUPPER
5.17	VISUALLY CONTRASTING STAINLESS STEEL STRIP, SEE SHEET 1/A002 FOR ACCESSIBILITY REQUIREMENTS	22.3	VENT THROUGH ROOF
DIVISION 06 - WOOD, PLASTIC & COMPOSITES		22.4	ELECTRIC WATER COOLER
6.1	WOOD BLOCK/NAILER, PRESSURE TREATED	22.5	KITCHEN SINK
6.2	3/4" PLYWOOD, FIRE RETARDANT TREATED	22.6	SERVICE SINK
6.3	5/8" GLASS MAT Faced GYP SHEATHING	22.7	FLOOR DRAIN
6.4	PLASTIC LAMINATE	22.8	FILTERED WATER SYSTEM FAUCET
6.5	SOLID-SURFACING MATERIAL COUNTERTOP	22.9	DUAL FLUSH TOILET @ WOMEN'S
6.6	RECYCLED WOOD TREAD	22.10	HIGH EFFICIENCY TOILET @ MEN'S
DIVISION 07 - THERMAL & MOISTURE PROTECTION		22.11	LOW CONSUMPTION URINAL
7.1	STAINLESS STEEL FLASHING/COUNTERFLASHING	22.12	COUNTERTOP SINK
7.2	THERMOPLASTIC MEMBRANE ROOFING	22.13	ELECTRONIC LAVATORY FAUCET, TYP.
7.3	MEMBRANE EDGE FASTENER @ 12" O/C	22.14	HAND SHOWER SET WITH SLIDE BAR
7.4	SAND COATED ROOF WALKWAY	22.15	URINAL ELECTRONIC FLUSH VALVE
7.5	RIGID ROOF INSULATION OF AGED R=30 (UON)	DIVISION 23 - HVAC	
7.6	BATT INSULATION R=19	23.1	BOILER FLUE
7.7	PVC MEMBRANE FLASHING	23.2	DUCT
7.8	EXTRUDED ALUM TRIM	23.3	PERIMETER HYDRONIC HEATER
7.9	ALUM FLASHING	23.4	FIRE DAMPER
7.10	FORMED SHEET SS COPING	23.5	RADIANT CEILING PANEL
7.11	BELOW GRADE DAMP/WATERPROOFING	23.6	MECHANICAL SHAFT OPENING
7.12	SEALANT WITH BACKER ROD	23.7	RADIANT FLOOR SLAB SYSTEM
7.13	20 GA GALVANIZED SPLASH PAN		
7.14	DOWN SPOUT		
7.15	WATERPROOFING MEMBRANE		
7.16	INSULATED METAL PANEL CLADDING		
7.17	ROOF SEISMIC JOINT COVER		
7.18	EXTERIOR WALL SEISMIC JOINT COVER		
7.19	INTERIOR WALL SEISMIC JOINT COVER		
7.20	CEILING SEISMIC JOINT COVER		
7.21	FIRESTOPPING		
7.22	SAND COATED ROOF WALKWAY		
7.23	METAL SPANDREL PANEL (INSULATED)		
7.24	THERMOPLASTIC MEMBRANE PARAPET FLASHING		
7.25	THERMOPLASTIC MEMBRANE COVER STRIP, HOT-AIR WELDED		
7.26	EXTRUDED ALUM BAR W/ FASTENERS @ 12" O.C. MAX		
7.27	FLOOR SEISMIC JOINT COVER		
7.28	S.S. PERFORATED RIBBED METAL (20 GA)		
7.29	METAL PANEL SOFFIT		
DIVISION 08 - OPENINGS			
8.1	DOOR & FRAME		
8.2	MOTORIZED OPERABLE WINDOW		
8.3	MANUAL OPERABLE WINDOW		
8.4	AUTOMATIC DOOR BOTTOM		
8.5	THRESHOLD		
8.6	GLAZED ALUM CURTAIN WALL SYSTEM		
8.7	1" INSULATED GLAZING		
8.8	FRITTED GLAZING		
8.9	SPANDREL GLAZING		
8.10	VISION GLASS (SAFETY WHERE REQUIRED)		
8.11	RECYCLED GLAZING		
8.12	AUTOMATIC ENTRANCE DOOR		
8.13	SKYLIGHT		
8.14	WEATHERSTRIPPING		
8.15	MTL SECURITY GATE		
8.16	DOOR PULL		
DIVISION 09 - FINISHES			
9.1	1/2" GWB TYPE X		
9.2	5/8" GWB TYPE X		
9.3	1" GWB SHAFT LINER		
9.4	20 GA MTL STUD @ 16" O/C		
9.5	SLOTTED TOP TRACK		
9.6	METAL STUD TRACK		
9.7	COLD FORMED FURRING CHANNEL		
9.8	SHAFT WALL STUD MIN 20 GA @ 24" O/C		
9.9	FRAMING ANGLE, MIN 20 GA GALV		
9.10	FURRING CHANNEL MIN 20 GA, SIZE AS NOTED		
9.11	SHAFT J RUNNER		
9.12	CERAMIC TILE		
9.13	REINFORCED MORTAR SETTING BED		
9.14	SCHEDULED FLOORING		
9.15	SUSPENDE GYP BOARD CEILING SYSTEM		
9.16	SCHEDULED WALL BASE		
9.17	PAINT		
9.18	5/8" CEMENTITIOUS TILE BACKER BOARD		
9.19	5/8" GLASS MAT FACED TILE BACKER BOARD		
9.20	NOT USED		
9.21	SOUND ATTENUATION BLANKET		
9.22	ACOUSTICAL INSULATION 3" (UON)		
9.23	SUSPENDE ACOUSTICAL CEILING		

PROJECT STATUS			
PRELIMINARY - NOT FOR CONSTRUCTION			
ISSUE	DATE	DESCRIPTION	
1	10/20/2008	30% PRICING	
2	11/07/2008	30% DESIGN REVISION	
3	12/12/2008	60% INTERNAL QA/QC & COST ESTIMATE	
4	12/19/2008	60% PRE-FINAL, NASA REVIEW	
5	01/19/2009	60% FINAL ISSUE TO NASA	
6	02/16/2009	90% QAQC & COST ESTIMATE	
MARK	DATE	DESCRIPTION	
DRAWN	G JOHNSON		
DESIGNED	WM+P		
CHECKED	R PRADHAN		
PROJMG			
REQUESTOR			
R&GA			
SAFETY			
SUPERVISOR			
		SIZE	REV
		D	A632
		SCALE	INDEX
			SHEET
			OF

TOILET / JANITOR ACCESSORIES
KEYNOTES

- T1 TOILET PARTITION, SEE FINISH SCHEDULE LEGEND, A105.
T2 URINAL PARTITION, SEE FINISH SCHEDULE LEGEND, A105.
T3 COMBINATION TOILET SEAT COVER / TOILET PAPER DISPENSER
T4 PAPER TOWEL DISPENSER (PUBLIC USE OR CUSTODIAL PER SPEC.)
T5 WASTE RECEPTACLE
T6 COMBINATION PAPER TOWEL DISPENSER / WASTE RECEPTACLE
T7 LIQUID SOAP DISPENSER (PUBLIC USE OR CUSTODIAL PER SPEC.)
T8 GRAB BAR
T9 VENDOR
T10 STALL COAT BUMPER / HOOK
T11 COAT HOOK
T12 MIRROR SEE INTERIOR ELEVATION FOR SIZE
T13 SHOWER CURTAIN & ROD
T14 FOLDING SHOWER SEAT, SEE DETAIL AX.XX
T15 FOLDING CHANGE BENCH, SEE DETAIL AX.XX
T16 SOAP DISH
T17 TOWEL BAR
T18 TOWEL HOOK
T19 MOP & BROOM HOLDER
T20 CORNER GUARD



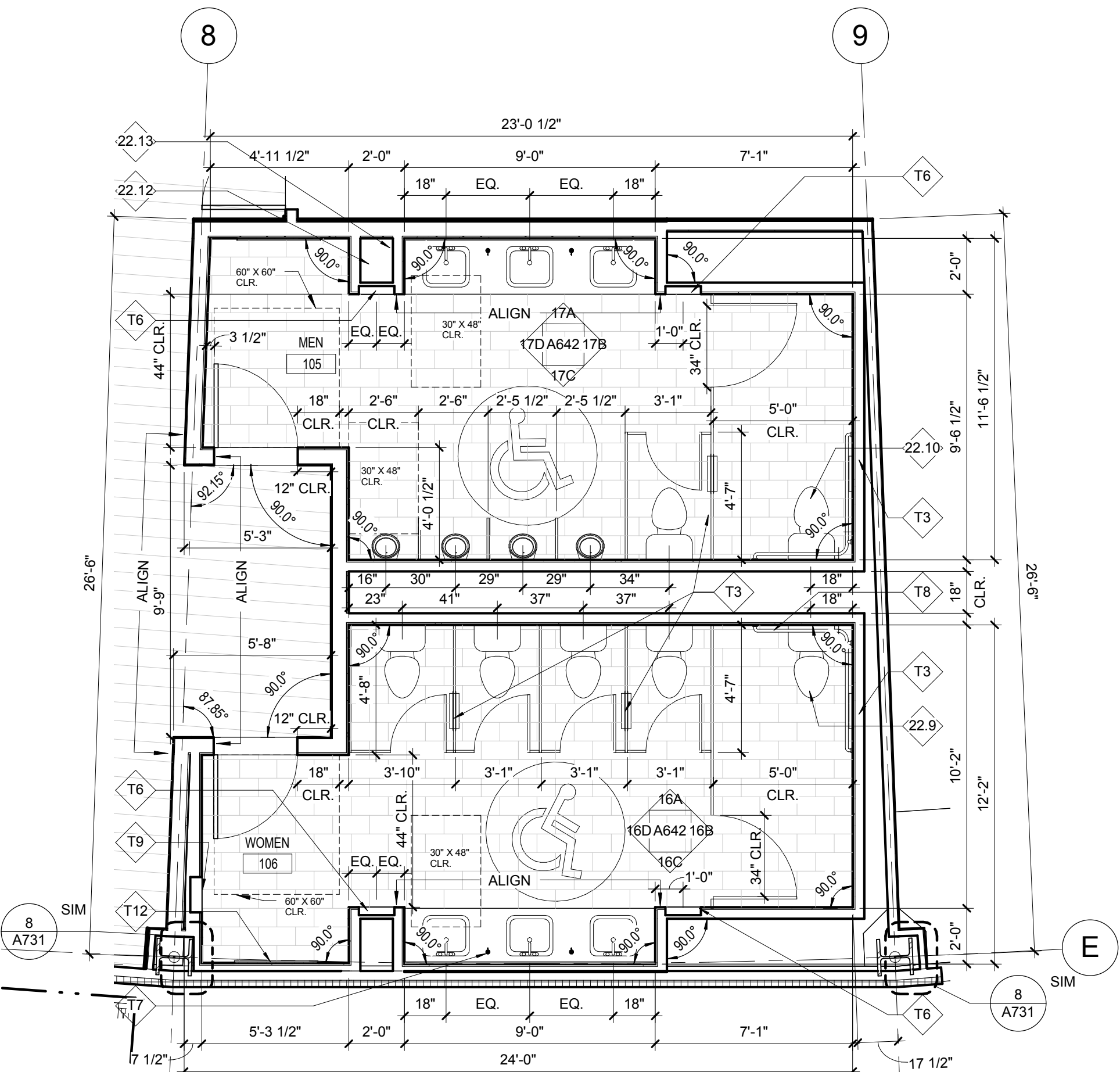
7 ENLARGED RESTROOM PLAN- SECOND FLOOR

A641 REF: A221 SCALE: 1/4" = 1'-0"

MATERIAL KEYNOTES

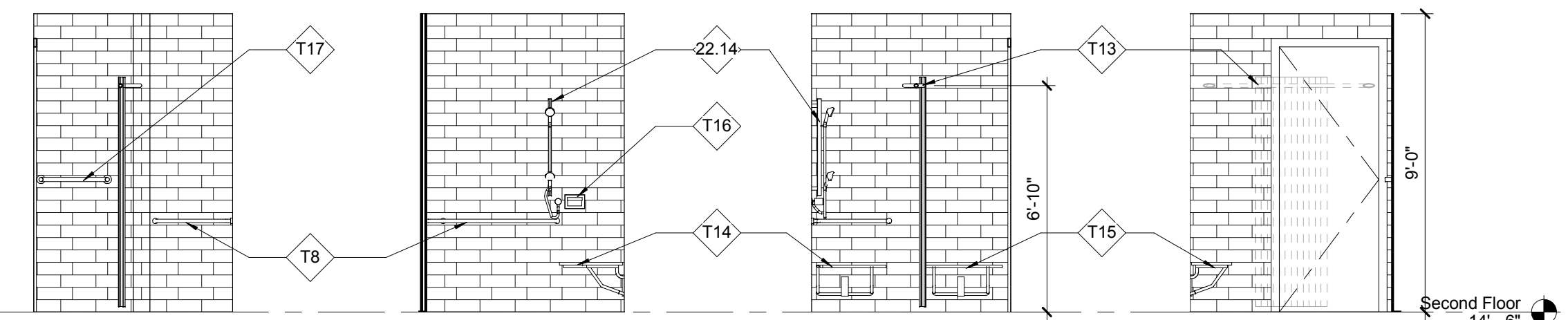
- DIVISION 03 - CONCRETE**
3.1 CAST IN PLACE CONCRETE
3.2 6" CONC HOUSEKEEPING PAD
3.3 VAPOR BARRIER
3.4 GRANULAR FILL
3.5 CANE DETECTION AREA
- DIVISION 05 - METALS**
5.1 STEEL BEAM
5.2 STEEL COLUMN
5.3 METAL DECK
5.4 STEEL ANGLE
5.5 STEEL PLATE
5.6 TUBULAR STEEL
5.7 STEEL BENT PLATE
5.8 STAINLESS STEEL FRAME
5.9 OPEN WEB STEEL JOIST
5.10 NOT USED
5.11 EXT. COLD FORMED METAL FRAMING, SEE STRUCT.
5.12 NOT USED
5.13 GUARDRAIL
5.14 HANDRAIL
5.15 METAL FRAMED STAIR
5.16 TEEL CHANNEL
5.17 VISUALLY CONTRASTING STAINLESS STEEL STRIP, SEE SHEET 1/A002 FOR ACCESSIBILITY REQUIREMENTS
- DIVISION 06 - WOOD, PLASTIC & COMPOSITES**
6.1 WOOD BLOCK/NAILED, PRESSURE TREATED
6.2 3/4" PLYWOOD, FIRE RETARDANT TREATED
6.3 5/8" GLASS MAT FACED GYP SHEATHING
6.4 PLASTIC LAMINATE
6.5 SOLID-SURFACING MATERIAL COUNTERTOP
6.6 RECYCLED WOOD TREAD
- DIVISION 07 - THERMAL & MOISTURE PROTECTION**
7.1 STAINLESS STEEL FLASHING/COUNTERFLASHING
7.2 THERMOPLASTIC MEMBRANE ROOFING
7.3 MEMBRANE EDGE FASTENER @ 12" O/C
7.4 SAND COATED ROOF WALKWAY
7.5 RIGID ROOF INSULATION OF AGED R=30 (UON)
7.6 BATT INSULATION R=19
7.7 PVC MEMBRANE FLASHING
7.8 EXTRUDED ALUM TRIM
7.9 ALUM FLASHING
7.10 FORMED SHEET SS COPING
7.11 BELOW GRADE DAMP/WATERPROOFING
7.12 SEALANT WITH BACKER ROD
7.13 20 GA GALVANIZED SPLASH PAN
7.14 DOWN SPOUT
7.15 WATERPROOFING MEMBRANE
7.16 INSULATED METAL PANEL CLADDING
7.17 ROOF SEISMIC JOINT COVER
7.18 EXTERIOR WALL SEISMIC JOINT COVER
7.19 INTERIOR WALL SEISMIC JOINT COVER
7.20 CEILING SEISMIC JOINT COVER
7.21 FIRES TOPPING
7.22 SAND COATED ROOF WALKWAY
7.23 METAL SPANDREL PANEL (INSULATED)
7.24 THERMOPLASTIC MEMBRANE PARAPET FLASHING
7.25 WELDED
7.26 EXTRUDED ALUM BAR W/ FASTENERS @ 12" O.C. MAX
7.27 FLOOR SEISMIC JOINT COVER
7.28 S.S. PERFORATED RIBBED METAL (20 GA)
7.29 METAL PANEL SOFFIT
- DIVISION 08 - OPENINGS**
8.1 DOOR & FRAME
8.2 MOTORIZED OPERABLE WINDOW
8.3 MANUAL OPERABLE WINDOW
8.4 AUTOMATIC DOOR BOTTOM
8.5 THRESHOLD
8.6 GLAZED ALUM CURTAIN WALL SYSTEM
8.7 1" INSULATED GLAZING
8.8 FRITTED GLAZING
8.9 SPANDREL GLAZING
8.10 VISION GLASS (SAFETY WHERE REQUIRED)
8.11 RECYCLED GLAZING
8.12 AUTOMATIC ENTRANCE DOOR
8.13 SKYLIGHT
8.14 WEATHERSTRIPPING
8.15 MTL SECURITY GATE
8.16 DOOR PULL
- DIVISION 09 - FINISHES**
9.1 1/2" GWB TYPE X
9.2 5/8" GWB TYPE X
9.3 1" GWB SHAFT LINER
9.4 20 GA MTL STUD @ 16" O/C
9.5 SLOTTED TOP TRACK
9.6 METAL STUD TRACK
9.7 COLD FORMED FURRING CHANNEL
9.8 SHAFT WALL STUD MIN 20 GA @ 24" O/C
9.9 FRAMING ANGLE MIN 20 GA GALV
9.10 FURRING CHANNEL MIN 20 GA, SIZE AS NOTED
9.11 SHAFT J RUNNER
9.12 CERAMIC TILE
9.13 REINFORCED MORTAR SETTING BED
9.14 SCHEDULED FLOORING
9.15 SUSPENDED GYP BOARD CEILING SYSTEM
9.16 SCHEDULED WALL BASE
9.17 PAINT
9.18 5/8" CEMENTITIOUS TILE BACKER BOARD
9.19 5/8" GLASS MAT FACED TILE BACKER BOARD
9.20 NOT USED
9.21 SOUND ATTENUATION BLANKET
9.22 ACOUSTICAL INSULATION 3" (UON)
9.23 SUSPENDED ACOUSTICAL CEILING
- DIVISION 10 - SPECIALTIES**
10.1 TOILET PARTITION
10.2 FIXED SUNSCREEN (BIPV @ BID ALTERNATE)
10.3 METAL LOCKER
10.4 FIRE EXTINGUISHER CABINET
10.5 DOOR STOP
10.6 ALUM LIGHT SHELF (BID ALTERNATE)
10.7 VINE CABLE SYSTEM
10.8 EXTRUDED ALUM LOUVER AIRFOIL
10.9 NOT USED
10.10 ACCESS FLOORING- 10" HIGH
- DIVISION 11 - EQUIPMENT**
11.1 MOTORIZED PROJECTION SCREEN
11.2 PROJECTOR
- DIVISION 12 - FURNISHINGS**
12.1 MOTORIZED WINDOW SHADE
12.2 SYSTEM FURNITURE, NIC
12.3 ENTRANCE FLOOR MAT & FRAME
- DIVISION 14 - EQUIPMENT**
14.1 HYDRAULIC HOLELESS ELEVATOR, 3500 LB
- DIVISION 22 - PLUMBING**
22.1 ROOF DRAIN
22.2 OVERFLOW SCUPPER
22.3 VENT THROUGH ROOF
22.4 ELECTRIC WATER COOLER
22.5 KITCHEN SINK
22.6 SERVICE SINK
22.7 FLOOR DRAIN
22.8 FILTERED WATER SYSTEM FAUCET
22.9 DUAL FLUSH TOILET @ WOMEN'S
22.10 HIGH EFFICIENCY TOILET @ MEN'S
22.11 LOW CONSUMPTION URINAL
22.12 COUNTERTOP SINK
22.13 ELECTRONIC LAVATORY FAUCET, TYP.
22.14 HAND SHOWER SET WITH SLIDE BAR
22.15 URINAL ELECTRONIC FLUSH VALVE
- DIVISION 23 - HVAC**
23.1 BOILER FLUE
23.2 DUCT
23.3 PERIMETER HYDRONIC HEATER
23.4 FIRE DAMPER
23.5 RADIANT CEILING PANEL
23.6 MECHANICAL SHAFT OPENING
23.7 RADIANT FLOOR SLAB SYSTEM

SCALE: 1/4" = 1'-0"



5 URINAL HEIGHT DIAGRAM

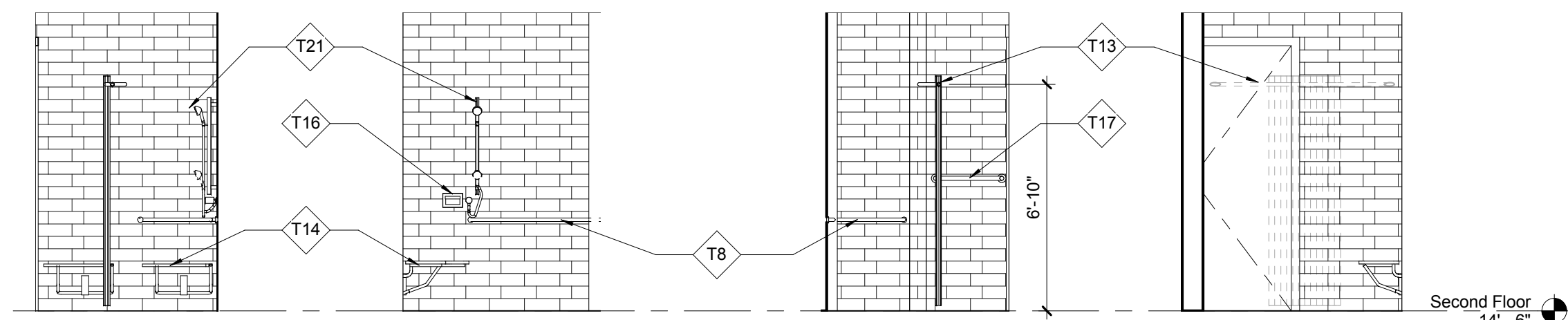
A641 REF: A211 SCALE: 1/4" = 1'-0"



14 ELEVATION - SECOND FLOOR MEN'S SHOWER

NOT TO SCALE

*NOTE:
SEE 01/A002 FOR ALL PLUMBING
FIXTURE AND TOILET ACCESSORY
MOUNTING HEIGHTS AND
CLEARANCES, U.N.O



13 ELEVATION - SECOND FLOOR WOMEN'S SHOWER

NOT TO SCALE

*NOTE:
SEE 01/A002 FOR ALL PLUMBING
FIXTURE AND TOILET ACCESSORY
MOUNTING HEIGHTS AND
CLEARANCES, U.N.O

PROJECT STATUS			
PRELIMINARY - NOT FOR CONSTRUCTION			
ISSUE	DATE	DESCRIPTION	
1	10/20/2008	30% PRICING	
2	11/07/2008	30% DESIGN REVISION	
3	12/12/2008	60% INTERNAL QA/QC & COST ESTIMATE	
4	12/19/2008	60% PRE-FINAL, NASA REVIEW	
5	01/19/2009	60% FINAL ISSUE TO NASA	
6	02/16/2009	90% QA/QC & COST ESTIMATE	
MARK	DATE	DESCRIPTION	
DRAWN	S MOSHGGOU		
DESIGNED	WM+P		
CHECKED	R PRADHAN		
PROJECTOR			
REQUESTOR			
R&QA			
SAFETY			
SUPERVISOR			
SCALE	D	25307	A232-0800-
INDEX			
SHEET			
OF			

Ames Research Center
Moffet Field, California

N232 COLLABORATIVE SUPPORT FACILITY

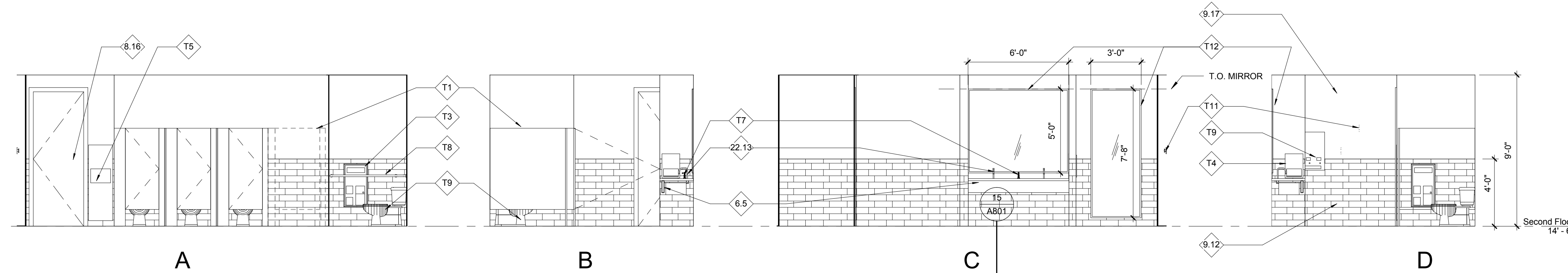
ENLARGED PLANS & INTERIOR
ELEVATIONS - RESTROOMS

SIZE: D CASE CODE: 25307 A232-0800- A641 REV

16 ELEVATION - SECOND FLOOR MEN'S RESTROOM

NOT TO SCALE

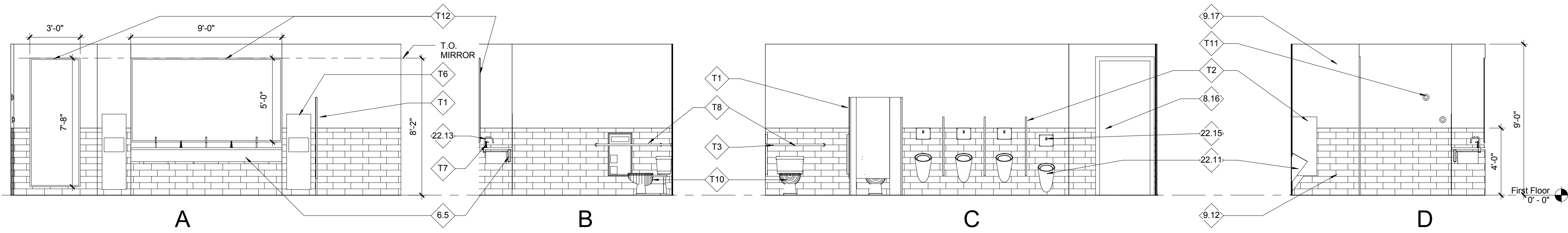
*NOTE:
SEE 6/A002 FOR ALL PLUMBING
FIXTURE AND TOILET ACCESSORY
MOUNTING HEIGHTS AND
CLEARANCES, U.N.O



15 ELEVATION - SECOND FLOOR WOMEN'S RESTROOM

NOT TO SCALE

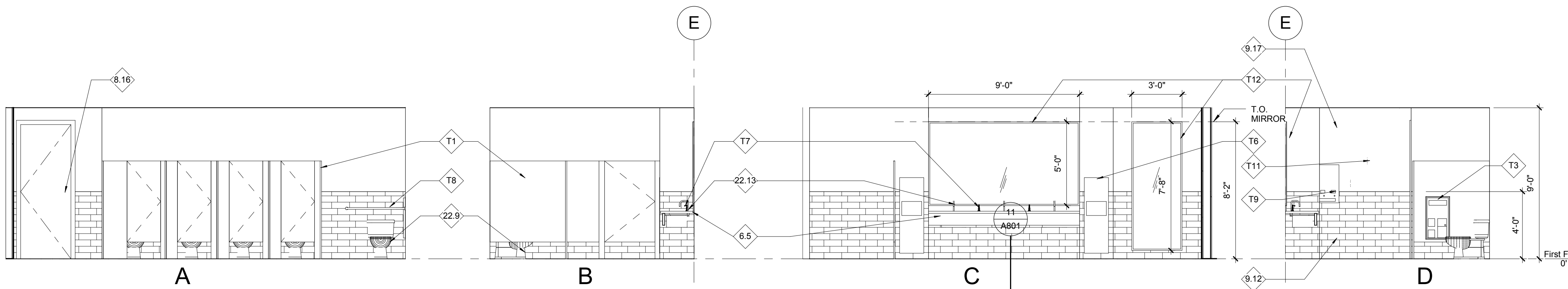
*NOTE:
SEE 6/A002 FOR ALL PLUMBING
FIXTURE AND TOILET ACCESSORY
MOUNTING HEIGHTS AND
CLEARANCES, U.N.O



14 ELEVATION - FIRST FLOOR MEN'S RESTROOM

NOT TO SCALE

*NOTE:
SEE 6/A002 FOR ALL PLUMBING
FIXTURE AND TOILET ACCESSORY
MOUNTING HEIGHTS AND
CLEARANCES, U.N.O



13 ELEVATION - FIRST FLOOR WOMEN'S RESTROOM

NOT TO SCALE

*NOTE:
SEE 6/A002 FOR ALL PLUMBING
FIXTURE AND TOILET ACCESSORY
MOUNTING HEIGHTS AND
CLEARANCES, U.N.O

MATERIAL KEYNOTES

DIVISION 03 - CONCRETE

- 3.1 CAST IN PLACE CONCRETE
- 3.2 6" CONC HOUSEKEEPING PAD
- 3.3 VAPOR BARRIER
- 3.4 GRANULAR FILL
- 3.5 CANE DETECTION AREA

DIVISION 05 - METALS

- 5.1 STEEL BEAM
- 5.2 STEEL COLUMN
- 5.3 METAL DECK
- 5.4 STEEL ANGLE
- 5.5 STEEL PLATE
- 5.6 TUBULAR STEEL
- 5.7 STEEL BENT PLATE
- 5.8 STAINLESS STEEL FRAME
- 5.9 OPEN WEB STEEL JOIST
- 5.10 NOT USED
- 5.11 EXT. COLD FORMED METAL FRAMING, SEE STRUCT.
- 5.12 NOT USED
- 5.13 GUARDRAIL
- 5.14 HANDRAIL
- 5.15 METAL FRAMED STAIR
- 5.16 TEEL CHANNEL
- 5.17 VISUALLY CONTRASTING STAINLESS STEEL STRIP, SEE SHEET 1/A002 FOR ACCESSIBILITY REQUIREMENTS

DIVISION 06 - WOOD, PLASTIC & COMPOSITES

- 6.1 WOOD BLOCK/NAILER, PRESSURE TREATED
- 6.2 3/4" PLYWOOD, FIRE RETARDANT TREATED
- 6.3 5/8" GLASS MAT FACED GYP SHEATHING
- 6.4 PLASTIC LAMINATE
- 6.5 SOLID-SURFACING MATERIAL COUNTERTOP
- 6.6 RECYCLED WOOD TREAD

DIVISION 07 - THERMAL & MOISTURE PROTECTION

- 7.1 STAINLESS STEEL FLASHING/COUNTERFLASHING
- 7.2 THERMOPLASTIC MEMBRANE ROOFING
- 7.3 MEMBRANE EDGE FASTENER @ 12" O/C
- 7.4 SAND COATED ROOF WALKWAY
- 7.5 RIGID ROOF INSULATION OF AGED R=30 (UON)
- 7.6 BATT INSULATION R=19
- 7.7 PVC MEMBRANE FLASHING
- 7.8 EXTRUDED ALUM TRIM
- 7.9 ALUM FLASHING
- 7.10 FORMED SHEET SS COPING
- 7.11 BELOW GRADE DAMP/WATERPROOFING
- 7.12 SEALANT WITH BACKER ROD
- 7.13 20 GA GALVANIZED SPLASH PAN
- 7.14 DOWN SPOUT
- 7.15 WATERPROOFING MEMBRANE
- 7.16 INSULATED METAL PANEL CLADDING
- 7.17 ROOF SEISMIC JOINT COVER
- 7.18 EXTERIOR WALL SEISMIC JOINT COVER
- 7.19 INTERIOR WALL SEISMIC JOINT COVER
- 7.20 CEILING SEISMIC JOINT COVER
- 7.21 FIRESTOPPING
- 7.22 SAND COATED ROOF WALKWAY
- 7.23 METAL SPANDREL PANEL (INSULATED)
- 7.24 THERMOPLASTIC MEMBRANE PARAPET FLASHING
- 7.25 THERMOPLASTIC MEMBRANE COVER STRIP, HOT-AIR WELDED
- 7.26 EXTRUDED ALUM BAR W/ FASTENERS @ 12" O.C. MAX
- 7.27 FLOOR SEISMIC JOINT COVER
- 7.28 S.S. PERFORATED RIBBED METAL (20 GA)
- 7.29 METAL PANEL SOFFIT

DIVISION 08 - OPENINGS

- 8.1 DOOR & FRAME
- 8.2 MOTORIZED OPERABLE WINDOW
- 8.3 MANUAL OPERABLE WINDOW
- 8.4 AUTOMATIC DOOR BOTTOM
- 8.5 THRESHOLD
- 8.6 GLAZED ALUM CURTAIN WALL SYSTEM
- 8.7 1" INSULATED GLAZING
- 8.8 FRITTED GLAZING
- 8.9 SPANDREL GLAZING
- 8.10 VISION GLASS (SAFETY WHERE REQUIRED)
- 8.11 RECYCLED GLAZING
- 8.12 AUTOMATIC ENTRANCE DOOR
- 8.13 SKYLIGHT
- 8.14 WEATHERSTRIPPING
- 8.15 MTL SECURITY GATE
- 8.16 DOOR PULL

DIVISION 09 - FINISHES

- 9.1 1/2" GWB TYPE X
- 9.2 5/8" GWB TYPE X
- 9.3 1" GWB SHAFT LINER
- 9.4 20 GA MTL STUD @ 16" O/C
- 9.5 SLOTTED TOP TRACK
- 9.6 METAL STUD TRACK
- 9.7 COLD FORMED FURRING CHANNEL
- 9.8 SHAFT WALL STUD MIN 20 GA @ 24" O/C
- 9.9 FRAMING ANGLE, MIN 20 GA
- 9.10 FURRING CHANNEL, MIN 20 GA, SIZE AS NOTED
- 9.11 SHAFT J RUNNER
- 9.12 CERAMIC TILE
- 9.13 REINFORCED MORTAR SETTING BED
- 9.14 SCHEDULED FLOORING
- 9.15 SUSPENDED GYP BOARD CEILING SYSTEM
- 9.16 SCHEDULED WALL BASE
- 9.17 PAINT
- 9.18 5/8" CEMENTITIOUS TILE BACKER BOARD
- 9.19 5/8" GLASS MAT FACED TILE BACKER BOARD
- 9.20 NOT USED
- 9.21 SOUND ATTENUATION BLANKET
- 9.22 ACOUSTICAL INSULATION 3" (UON)
- 9.23 SUSPENDED ACOUSTICAL CEILING

DIVISION 10 - SPECIALTIES

- 10.1 TOILET PARTITION
- 10.2 FIXED SUNSCREEN (BIPV @ BID ALTERNATE)
- 10.3 METAL LOCKER
- 10.4 FIRE EXTINGUISHER CABINET
- 10.5 DOOR STOP
- 10.6 ALUM LIGHT SHELF (BID ALTERNATE)
- 10.7 VINE CABLE SYSTEM
- 10.8 EXTRUDED ALUM LOUVER AIRFOIL
- 10.9 NOT USED
- 10.10 ACCESS FLOORING- 10" HIGH

DIVISION 11 - EQUIPMENT

- 11.1 MOTORIZED PROJECTION SCREEN
- 11.2 PROJECTOR

DIVISION 12 - FURNISHINGS

- 12.1 MOTORIZED WINDOW SHADE
- 12.2 SYSTEM FURNITURE, NIC
- 12.3 ENTRANCE FLOOR MAT & FRAME

DIVISION 14 - EQUIPMENT

- 14.1 HYDRAULIC HOLELESS ELEVATOR, 3500 LB

DIVISION 22 - PLUMBING

- 22.1 ROOF DRAIN
- 22.2 OVERFLOW SCUPPER
- 22.3 VENT THROUGH ROOF
- 22.4 ELECTRIC WATER COOLER
- 22.5 KITCHEN SINK
- 22.6 SERVICE SINK
- 22.7 FLOOR DRAIN
- 22.8 FILTERED WATER SYSTEM FAUCET
- 22.9 DUAL FLUSH TOILET @ WOMEN'S
- 22.10 HIGH EFFICIENCY TOILET @ MEN'S
- 22.11 LOW CONSUMPTION URINAL
- 22.12 COUNTERTOP SINK
- 22.13 ELECTRONIC LAVATORY FAUCET, TYP.
- 22.14 HAND SHOWER SET WITH SLIDE BAR
- 22.15 URINAL ELECTRONIC FLUSH VALVE

DIVISION 23 - HVAC

- 23.1 BOILER FLUE
- 23.2 DUCT
- 23.3 PERIMETER HYDRONIC HEATER
- 23.4 FIRE DAMPER
- 23.5 RADIANT CEILING PANEL
- 23.6 MECHANICAL SHAFT OPENING
- 23.7 RADIANT FLOOR SLAB SYSTEM

TOILET / JANITOR ACCESSORIES KEYNOTES

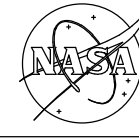
- T1 TOILET PARTITION, SEE FINISH SCHEDULE LEGEND, A105.
- T2 URINAL PARTITION, SEE FINISH SCHEDULE LEGEND, A105.
- T3 COMBINATION TOILET SEAT COVER / TOILET PAPER DISPENSER
- T4 PAPER TOWEL DISPENSER (PUBLIC USE OR CUSTODIAL PER SPEC.)
- T5 WASTE RECEPTACLE
- T6 COMBINATION PAPER TOWEL DISPENSER / WASTE RECEPTACLE
- T7 LIQUID SOAP DISPENSER (PUBLIC USE OR CUSTODIAL PER SPEC.)
- T8 GRAB BAR
- T9 VENDOR
- T10 STALL COAT BUMPER / HOOK
- T11 COAT HOOK
- T12 MIRROR SEE INTERIOR ELEVATION FOR SIZE
- T13 SHOWER CURTAIN & ROD
- T14 FOLDING SHOWER SEAT, SEE DETAIL AX.XX
- T15 FOLDING CHANGE BENCH, SEE DETAIL AX.XX
- T16 SOAP DISH
- T17 TOWEL BAR
- T18 TOWEL HOOK
- T19 MOP & BROOM HOLDER
- T20 CORNER GUARD

SCALE: 1/4" = 1'-0"



PRELIMINARY - NOT FOR CONSTRUCTION

PROJECT STATUS		
ISSUE	DATE	DESCRIPTION
1	10/20/2008	30% PRICING
2	11/07/2008	30% DESIGN REVISION
3	12/12/2008	60% INTERNAL QA/QC & COST ESTIMATE
4	12/19/2008	60% PRE-FINAL, NASA REVIEW
5	01/19/2009	60% FINAL ISSUE TO NASA
6	02/16/2009	90% QAQC & COST ESTIMATE
MARK	DATE	DESCRIPTION
DRAWN	S MOSHGGOU	
DESIGNED	WM+P	
CHECKED	R PRADHAN	
PROJ/MGR		
REQUESTOR		
R&QA		
SAFETY		
SUPERVISOR		
SIZE	CASE CODE	REV
D	25307	A642
SCALE	INDEX	SHEET OF

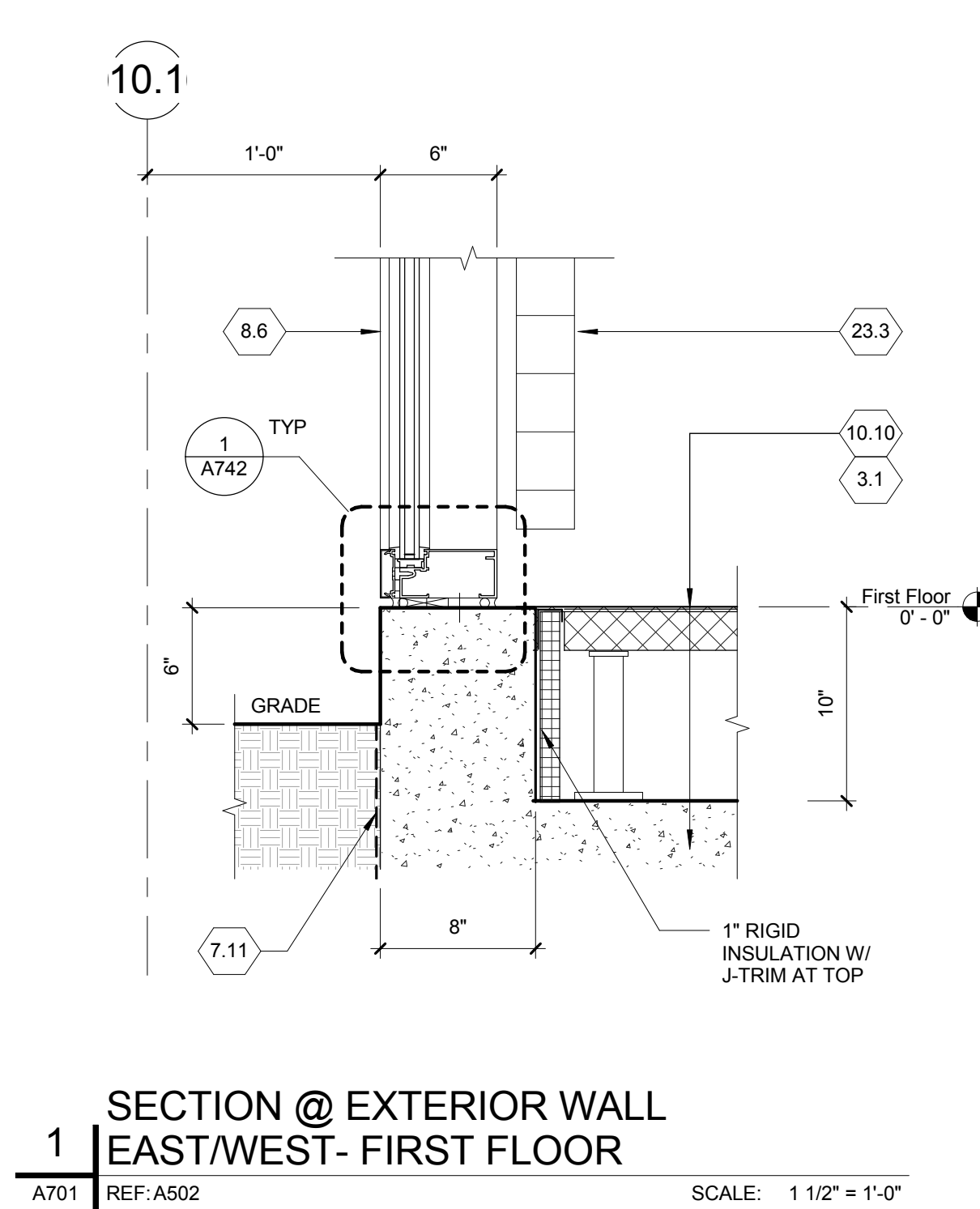
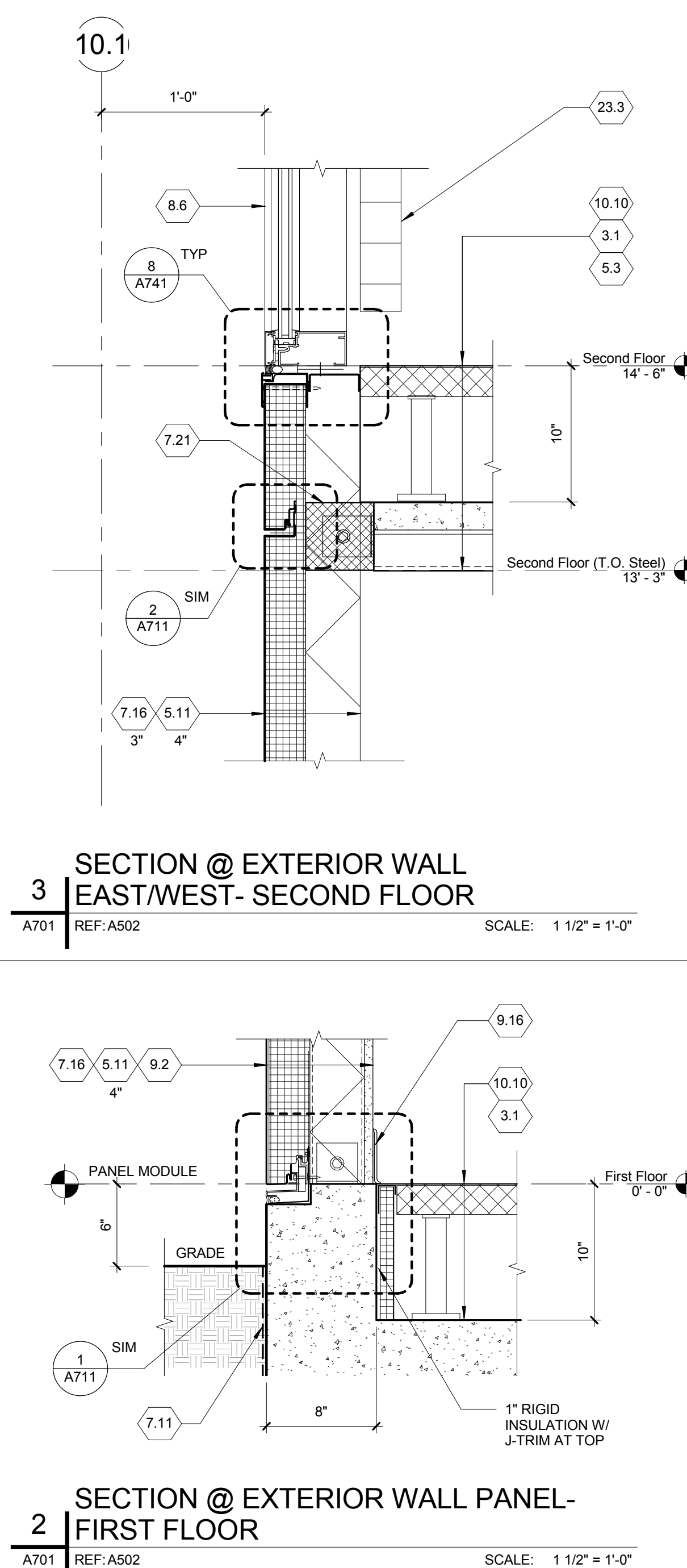
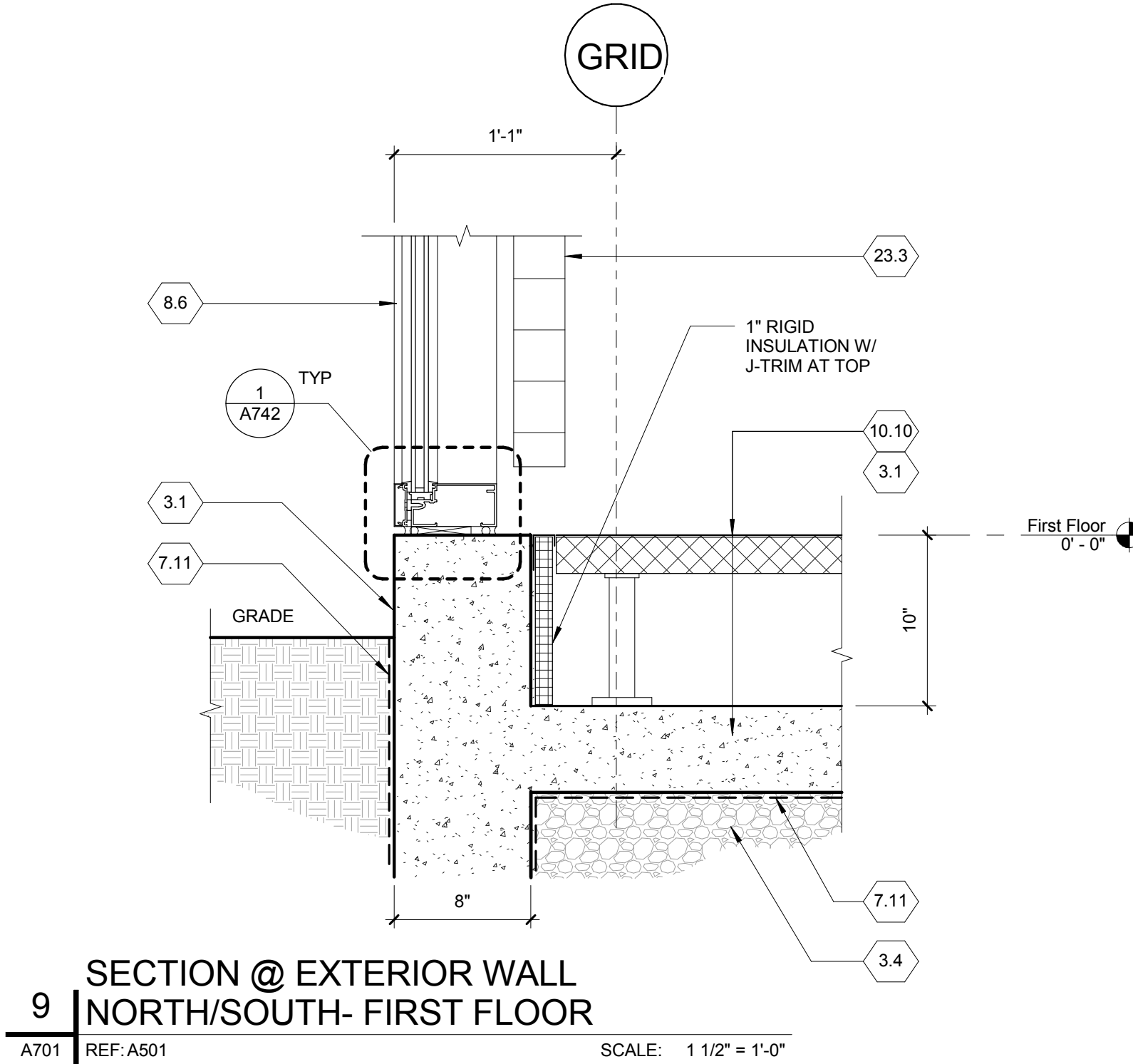
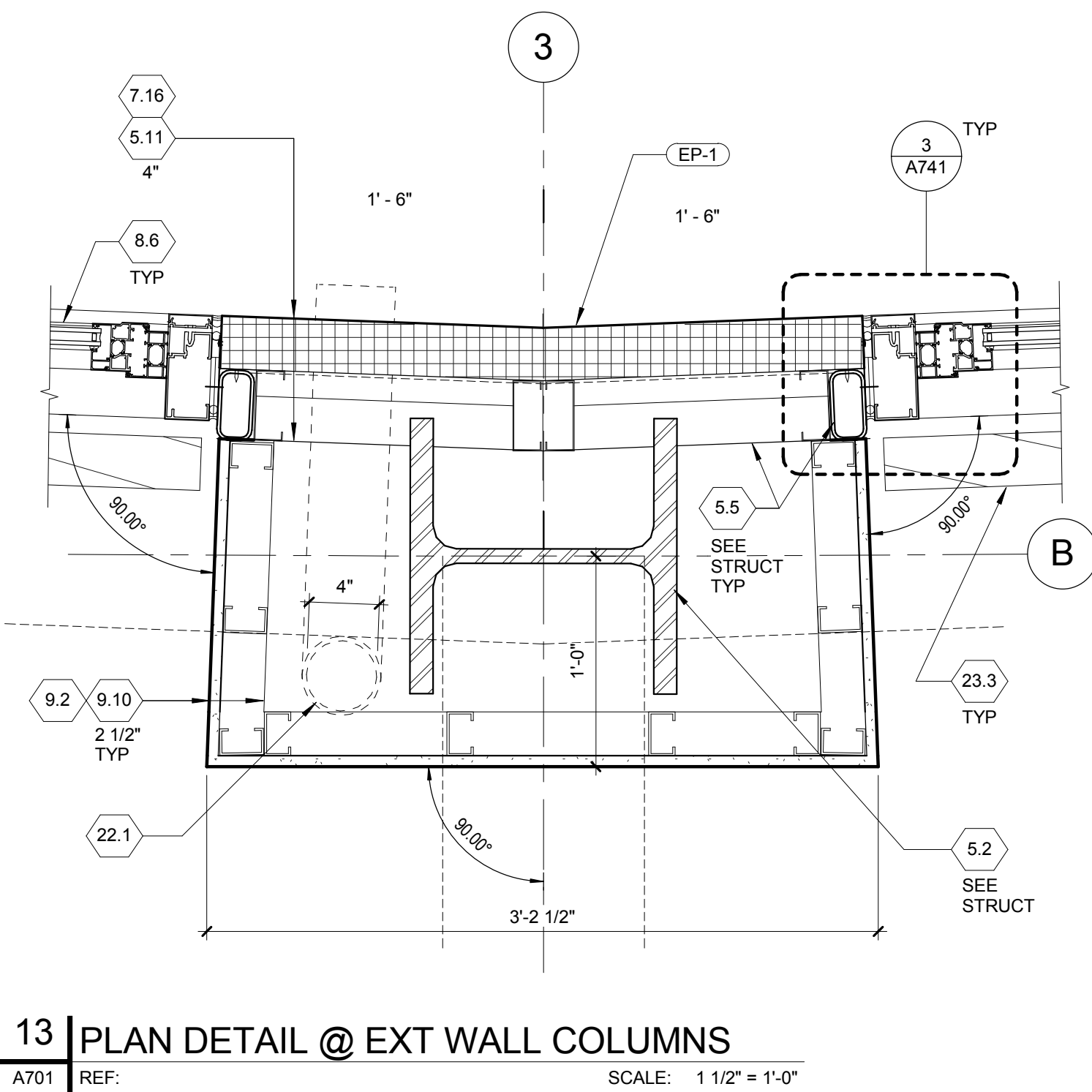
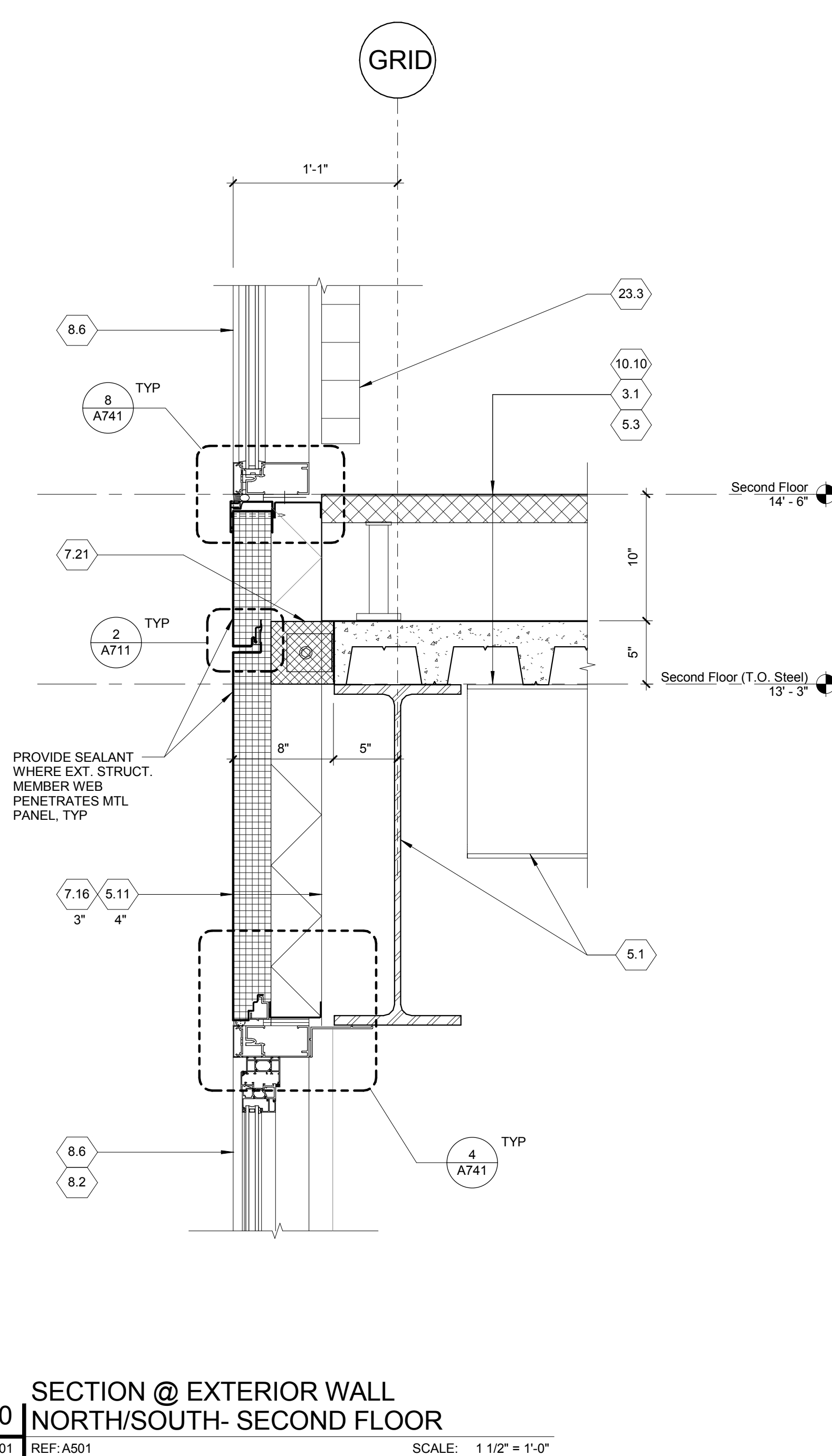
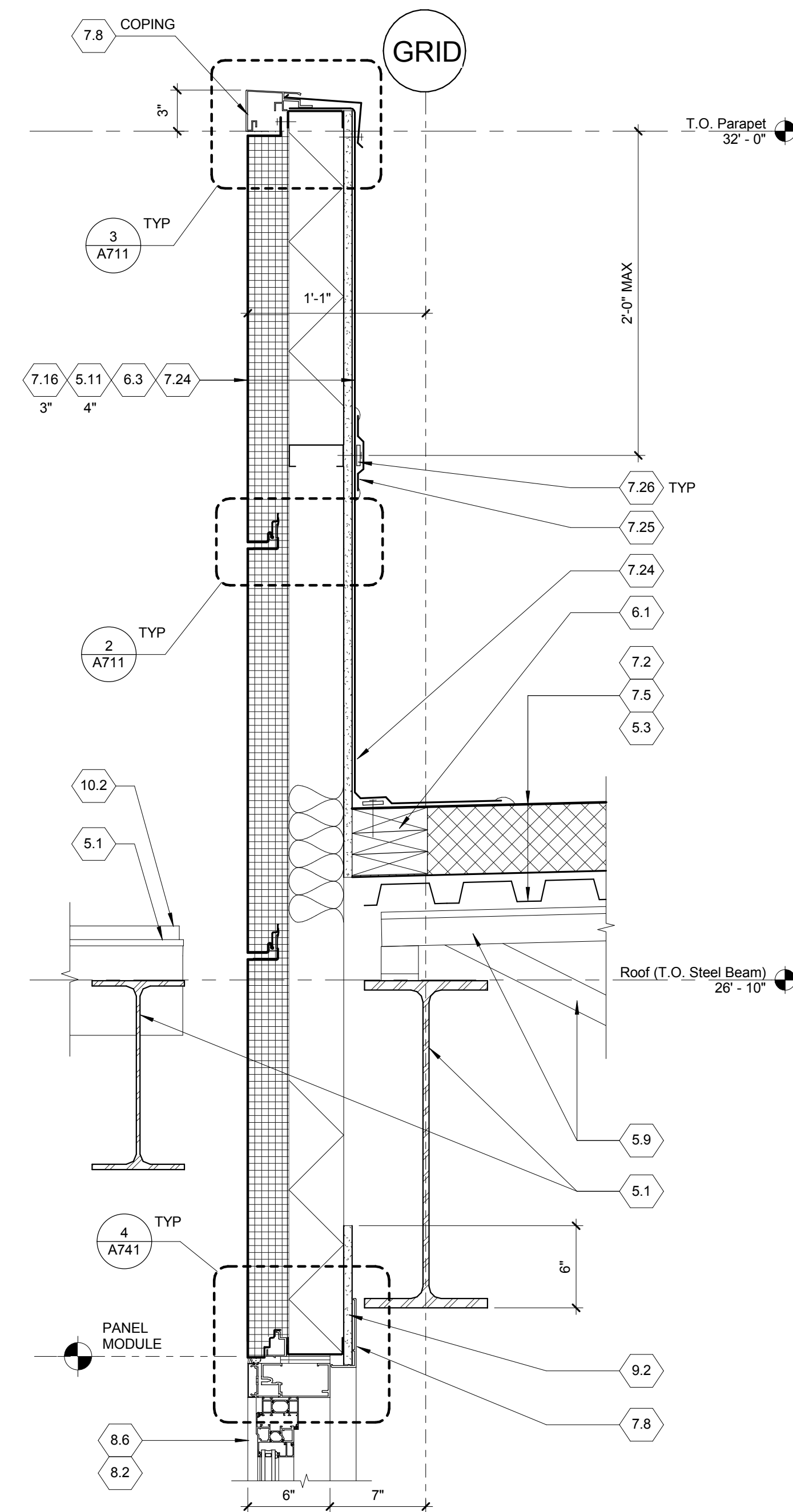


Ames Research Center
Moffet Field, California

N232 COLLABORATIVE SUPPORT FACILITY


INTERIOR ELEVATIONS -
RESTROOMS

																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						</
--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	----

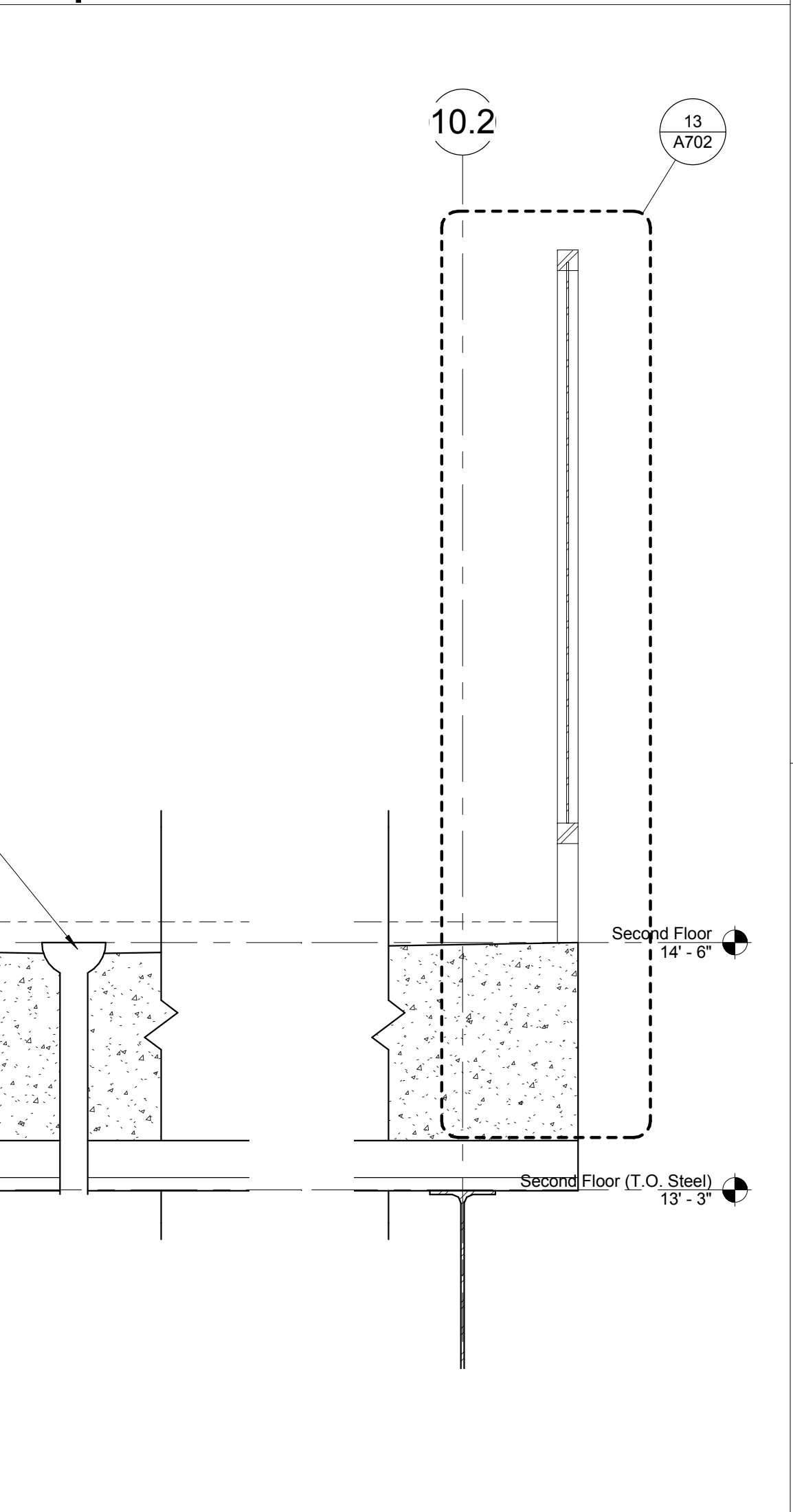
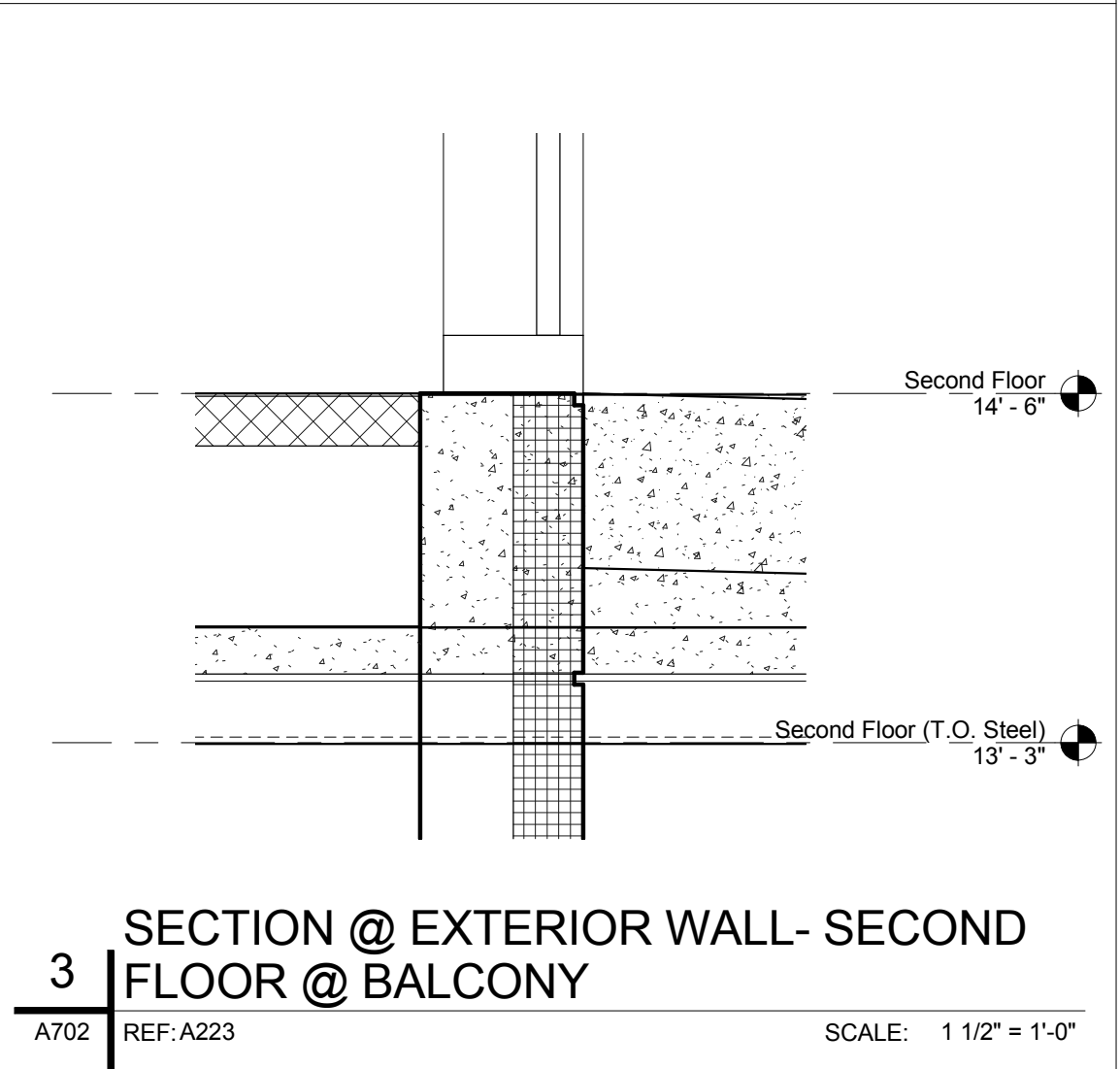
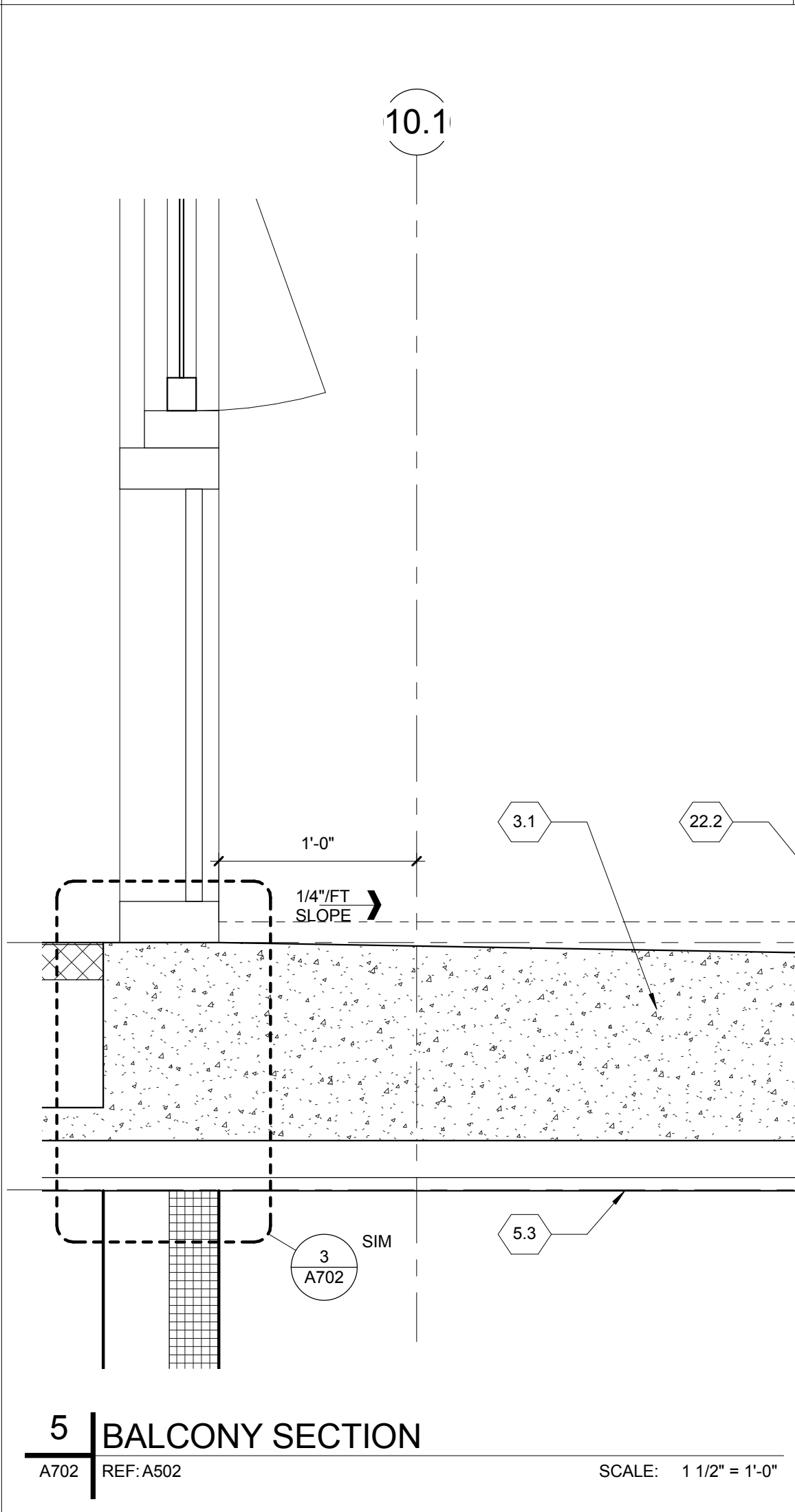
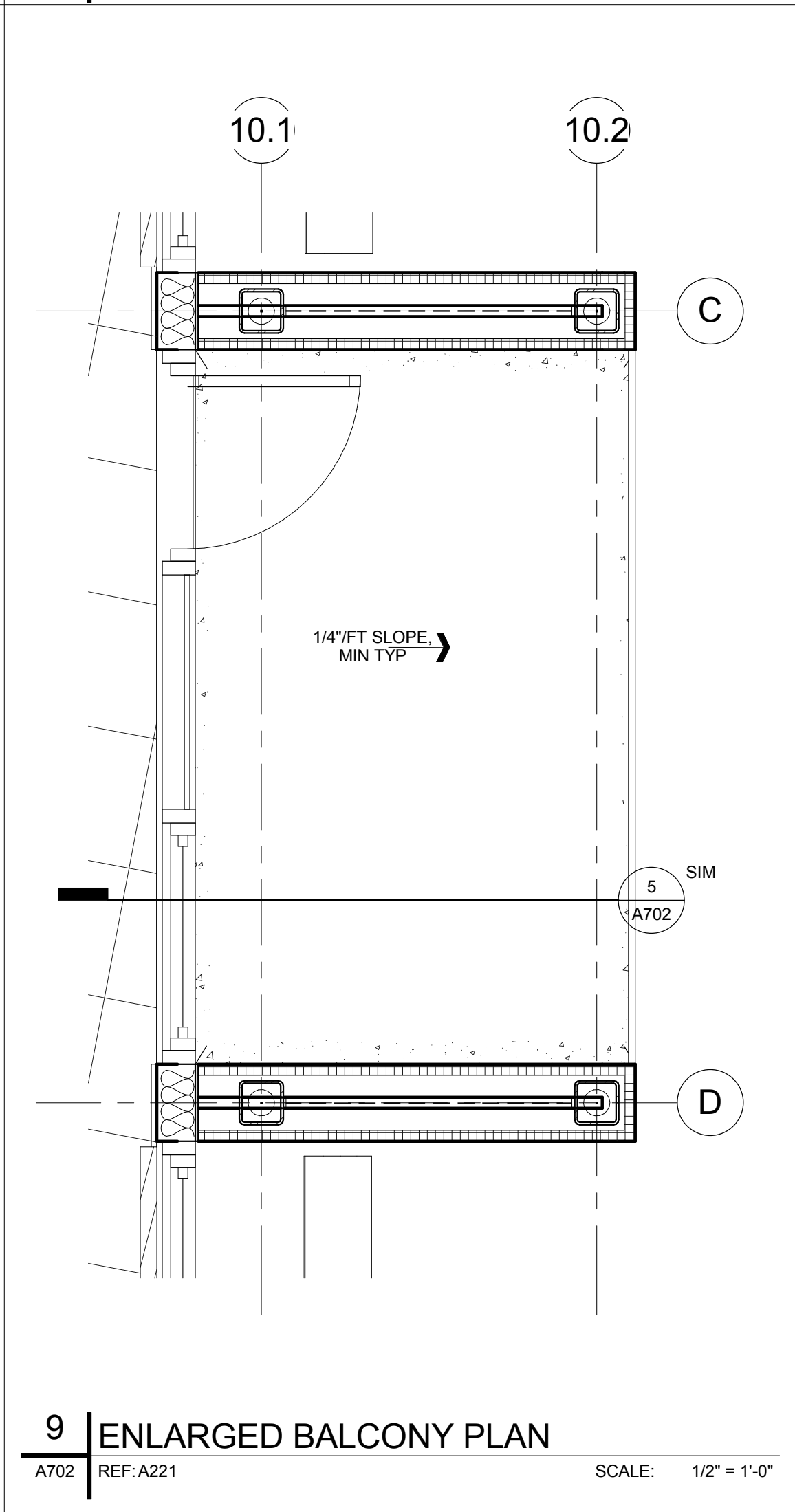
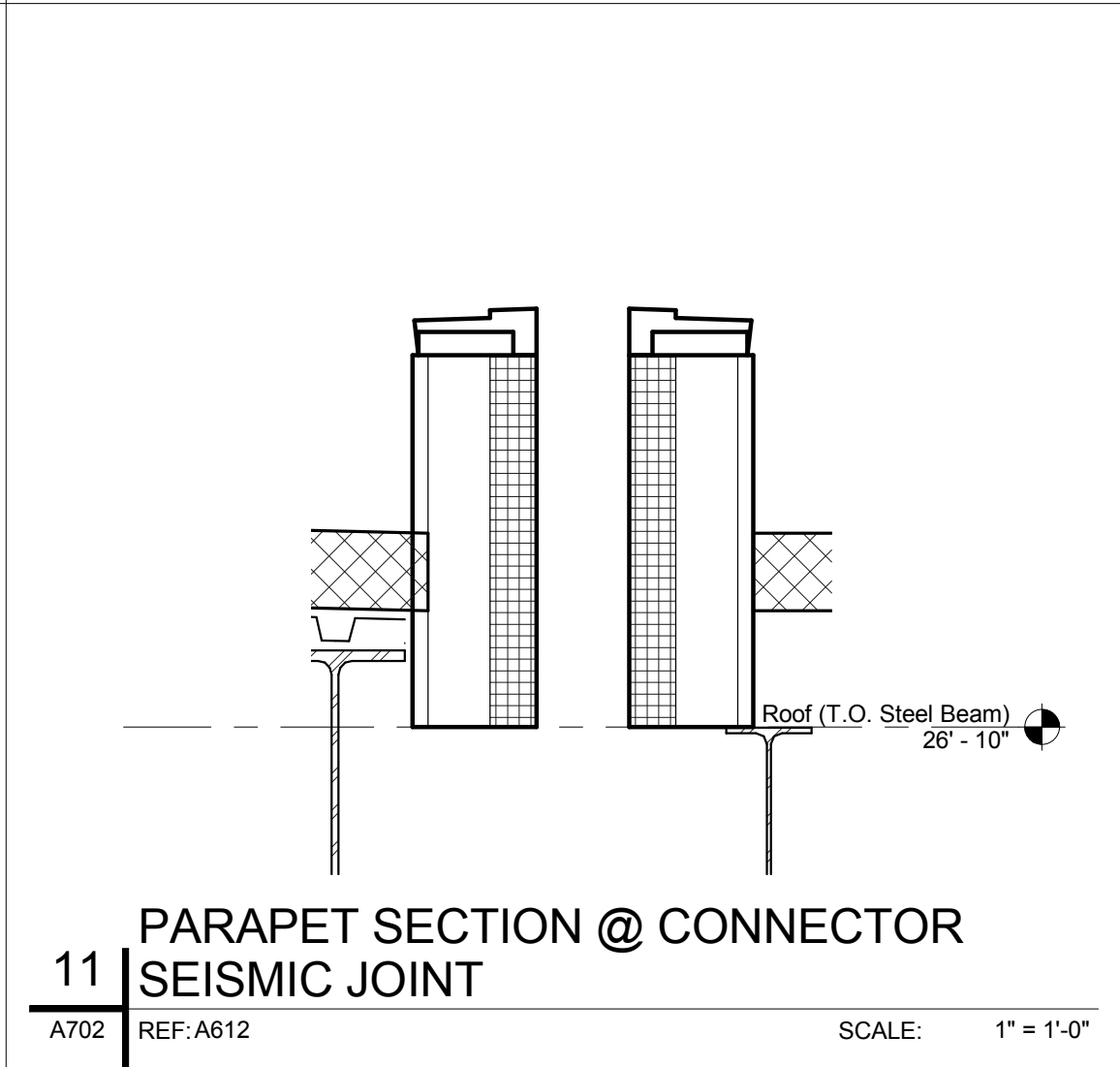
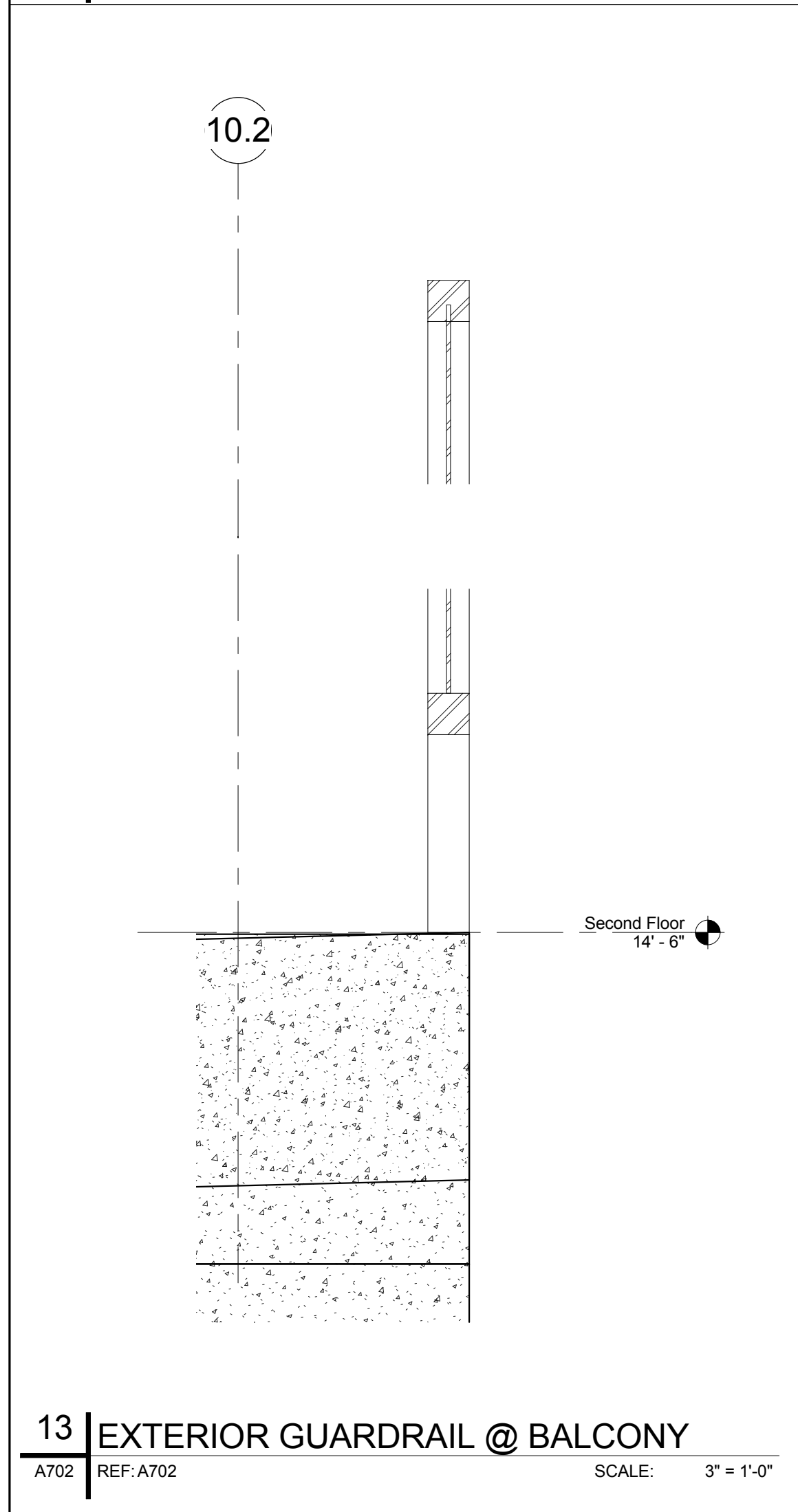
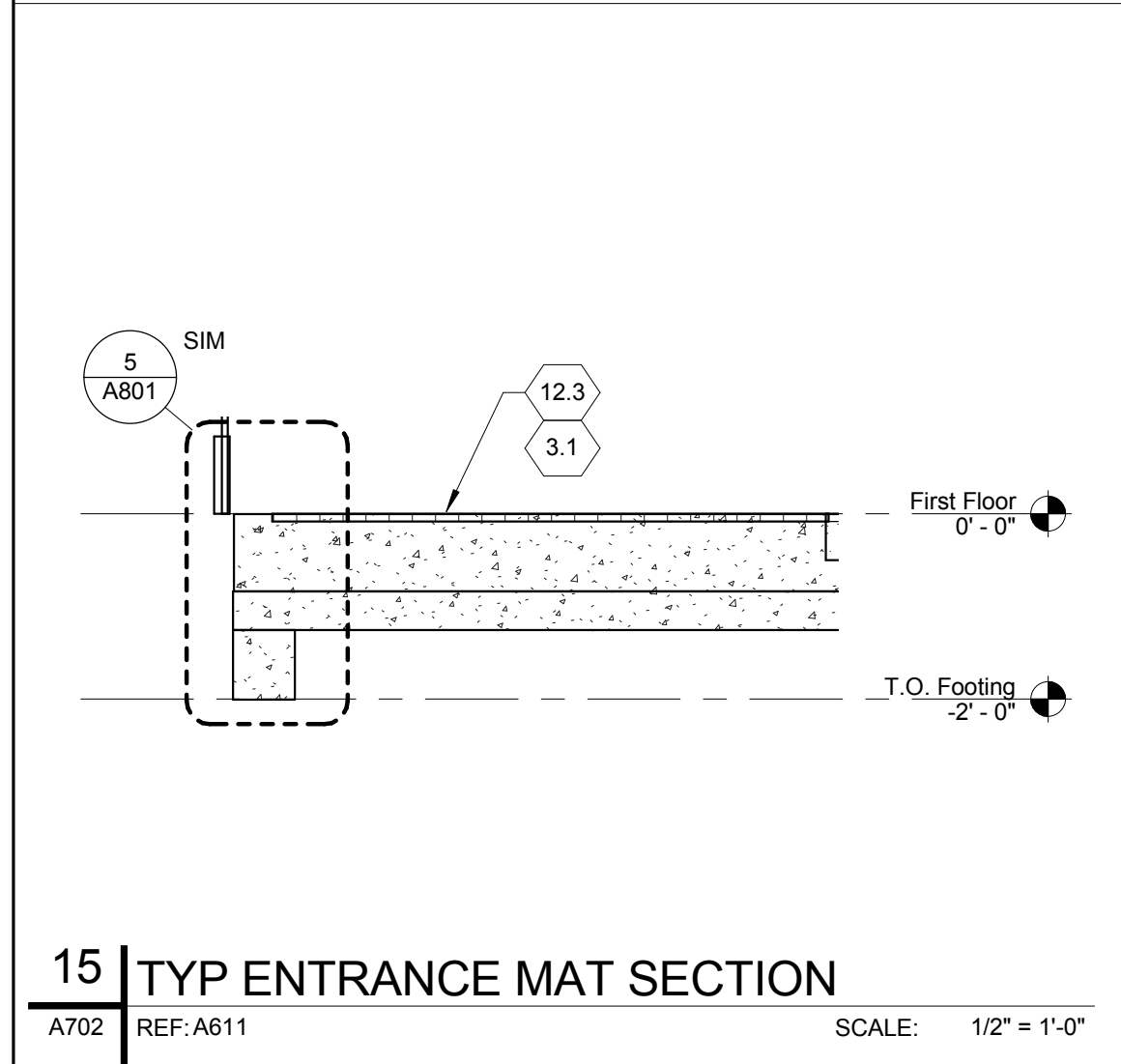


MATERIAL KEYNOTES

- | | | | |
|------|---|-------|--|
| 3.1 | DIVISION 03 - CONCRETE | 10.1 | DIVISION 10 - SPECIALTIES |
| 3.2 | 3.1 CAST IN PLACE CONCRETE | 10.1 | TOILET PARTITION |
| 3.3 | 3.2 6" CONC HOUSEKEEPING PAD | 10.2 | FIXED SUNSCREEN (BIPV @ BID ALTERNATE) |
| 3.4 | 3.3 VAPOR BARRIER | 10.3 | METAL LOCKER |
| 3.5 | 3.4 GRANULAR FILL | 10.4 | FIRE EXTINGUISHER CABINET |
| | 3.5 CANE DETECTION AREA | 10.5 | DOOR STOP |
| | | 10.6 | ALUM LIGHT SHELF (BID ALTERNATE) |
| | | 10.7 | VINE CABLE SYSTEM |
| | | 10.8 | EXTRUDED ALUM LOUVER AIRFOIL |
| | | 10.9 | NOT USED |
| | | 10.10 | ACCESS FLOORING- 10" HIGH |
| | DIVISION 05 - METALS | | DIVISION 11 - EQUIPMENT |
| 5.1 | 5.1 STEEL BEAM | 11.1 | MOTORIZED PROJECTION SCREEN |
| 5.2 | 5.2 STEEL COLUMN | 11.2 | PROJECTOR |
| 5.3 | 5.3 METAL DECK | | DIVISION 12 - FURNISHINGS |
| 5.4 | 5.4 STEEL ANGLE | 12.1 | MOTORIZED WINDOW SHADE |
| 5.5 | 5.5 STEEL PLATE | 12.2 | SYSTEM FURNITURE, NIC |
| 5.6 | 5.6 TUBULAR STEEL | 12.3 | ENTRANCE FLOOR MAT & FRAME |
| 5.7 | 5.7 STEEL BENT PLATE | | DIVISION 14 - EQUIPMENT |
| 5.8 | 5.8 STAINLESS STEEL FRAME | 14.1 | HYDRAULIC HOLELESS ELEVATOR, 3500 LB |
| 5.9 | 5.9 OPEN WEB STEEL JOIST | | DIVISION 22 - PLUMBING |
| 5.10 | 5.10 NOT USED | 22.1 | ROOF DRAIN |
| 5.11 | 5.11 EXT. COLD FORMED METAL FRAMING, SEE STRUCT. | 22.2 | OVERFLOW SCUPPER |
| 5.12 | 5.12 NOT USED | 22.3 | VENT THROUGH ROOF |
| 5.13 | 5.13 GUARDRAIL | 22.4 | ELECTRIC WATER COOLER |
| 5.14 | 5.14 HANDRAIL | 22.5 | KITCHEN SINK |
| 5.15 | 5.15 METAL FRAMED STAIR | 22.6 | SERVICE SINK |
| 5.16 | 5.16 TEEL CHANNEL | 22.7 | FLOOR DRAIN |
| 5.17 | 5.17 VISUALLY CONTRASTING STAINLESS STEEL STRIP, SEE SHEET 11A/002 FOR ACCESSIBILITY REQUIREMENTS | 22.8 | FILTERED WATER SYSTEM FAUCET |
| | | 22.9 | DUAL FLUSH TOILET @ WOMEN'S |
| | | 22.10 | HIGH EFFICIENCY TOILET @ MEN'S |
| | | 22.11 | LOW CONSUMPTION URINAL |
| | | 22.12 | COUNTERTOP SINK |
| | | 22.13 | ELECTRONIC LAVATORY FAUCET, TYP. |
| | | 22.14 | HAND SHOWER SET WITH SLIDE BAR |
| | | 22.15 | URINAL ELECTRONIC FLUSH VALVE |
| | DIVISION 06 - WOOD, PLASTIC & COMPOSITES | | DIVISION 23 - HVAC |
| 6.1 | 6.1 WOOD BLOCK/NAILER, PRESSURE TREATED | 23.1 | BOILER FLUE |
| 6.2 | 6.2 3/4" PLYWOOD, FIRE RETARDANT TREATED | 23.2 | DUCT |
| 6.3 | 6.3 5/8" GLASS MAT FACED GYP SHEATHING | 23.3 | PERIMETER HYDRONIC HEATER |
| 6.4 | 6.4 PLASTIC LAMINATE | 23.4 | FIRE DAMPER |
| 6.5 | 6.5 SOLID-SURFACING MATERIAL COUNTERTOP | 23.5 | RADIANT CEILING PANEL |
| 6.6 | 6.6 RECYCLED WOOD TREAD | 23.6 | MECHANICAL SHAFT OPENING |
| | | 23.7 | RADIANT FLOOR SLAB SYSTEM |
| | DIVISION 07 - THERMAL & MOISTURE PROTECTION | | |
| 7.1 | 7.1 STAINLESS STEEL FLASHING/COUNTERFLASHING | | |
| 7.2 | 7.2 THERMOPLASTIC MEMBRANE ROOFING | | |
| 7.3 | 7.3 MEMBRANE EDGE FASTENER @ 12" O/C | | |
| 7.4 | 7.4 SAND COATED ROOF WALKWAY | | |
| 7.5 | 7.5 RIGID ROOF INSULATION OF AGED R=30 (UON) | | |
| 7.6 | 7.6 BATT INSULATION R=19 | | |
| 7.7 | 7.7 PVC MEMBRANE FLASHING | | |
| 7.8 | 7.8 EXTRUDED ALUM TRIM | | |
| 7.9 | 7.9 ALUM FLASHING | | |
| 7.10 | 7.10 FORMED SHEET SS COPING | | |
| 7.11 | 7.11 BELOW GRADE DAMP/WATERPROOFING | | |
| 7.12 | 7.12 SEALANT WITH BACKER ROD | | |
| 7.13 | 7.13 20 GA GALVANIZED SPLASH PAN | | |
| 7.14 | 7.14 DOWN SPOUT | | |
| 7.15 | 7.15 WATERPROOFING MEMBRANE | | |
| 7.16 | 7.16 INSULATED METAL PANEL CLADDING | | |
| 7.17 | 7.17 ROOF SEISMIC JOINT COVER | | |
| 7.18 | 7.18 EXTERIOR WALL SEISMIC JOINT COVER | | |
| 7.19 | 7.19 INTERIOR WALL SEISMIC JOINT COVER | | |
| 7.20 | 7.20 CEILING SEISMIC JOINT COVER | | |
| 7.21 | 7.21 FIRESTOPPING | | |
| 7.22 | 7.22 SAND COATED ROOF WALKWAY | | |
| 7.23 | 7.23 METAL SPANDREL PANEL (INSULATED) | | |
| 7.24 | 7.24 THERMOPLASTIC MEMBRANE PARAPET FLASHING | | |
| 7.25 | 7.25 THERMOPLASTIC MEMBRANE COVER STRIP, HOT-AIR WELDED | | |
| 7.26 | 7.26 EXTRUDED ALUM BAR W/ FASTENERS @ 12" O.C MAX | | |
| 7.27 | 7.27 FLOOR SEISMIC JOINT COVER | | |
| 7.28 | 7.28 S.S. PERFORATED RIBBED METAL (20 GA) | | |
| 7.29 | 7.29 METAL PANEL SOFFIT | | |
| | DIVISION 08 - OPENINGS | | |
| 8.1 | 8.1 DOOR & FRAME | | |
| 8.2 | 8.2 MOTORIZED OPERABLE WINDOW | | |
| 8.3 | 8.3 MANUAL OPERABLE WINDOW | | |
| 8.4 | 8.4 AUTOMATIC DOOR BOTTOM | | |
| 8.5 | 8.5 THRESHOLD | | |
| 8.6 | 8.6 GLAZED ALUM CURTAIN WALL SYSTEM | | |
| 8.7 | 8.7 1" INSULATED GLAZING | | |
| 8.8 | 8.8 FRITTED GLAZING | | |
| 8.9 | 8.9 SPANDREL GLAZING | | |
| 8.10 | 8.10 VISION GLASS (SAFETY WHERE REQUIRED) | | |
| 8.11 | 8.11 RECYCLED GLAZING | | |
| 8.12 | 8.12 AUTOMATIC ENTRANCE DOOR | | |
| 8.13 | 8.13 SKYLIGHT | | |
| 8.14 | 8.14 WEATHERSTRIPPING | | |
| 8.15 | 8.15 MTL SECURITY GATE | | |
| 8.16 | 8.16 DOOR PULL | | |
| | DIVISION 09 - FINISHES | | |
| 9.1 | 9.1 1/2" GWB TYPE X | | |
| 9.2 | 9.2 5/8" GWB TYPE X | | |
| 9.3 | 9.3 1" GWB SHAFT LINER | | |
| 9.4 | 9.4 20 GA MTL STUD @ 16" O/C | | |
| 9.5 | 9.5 SLOTTED TOP TRACK | | |
| | | | |

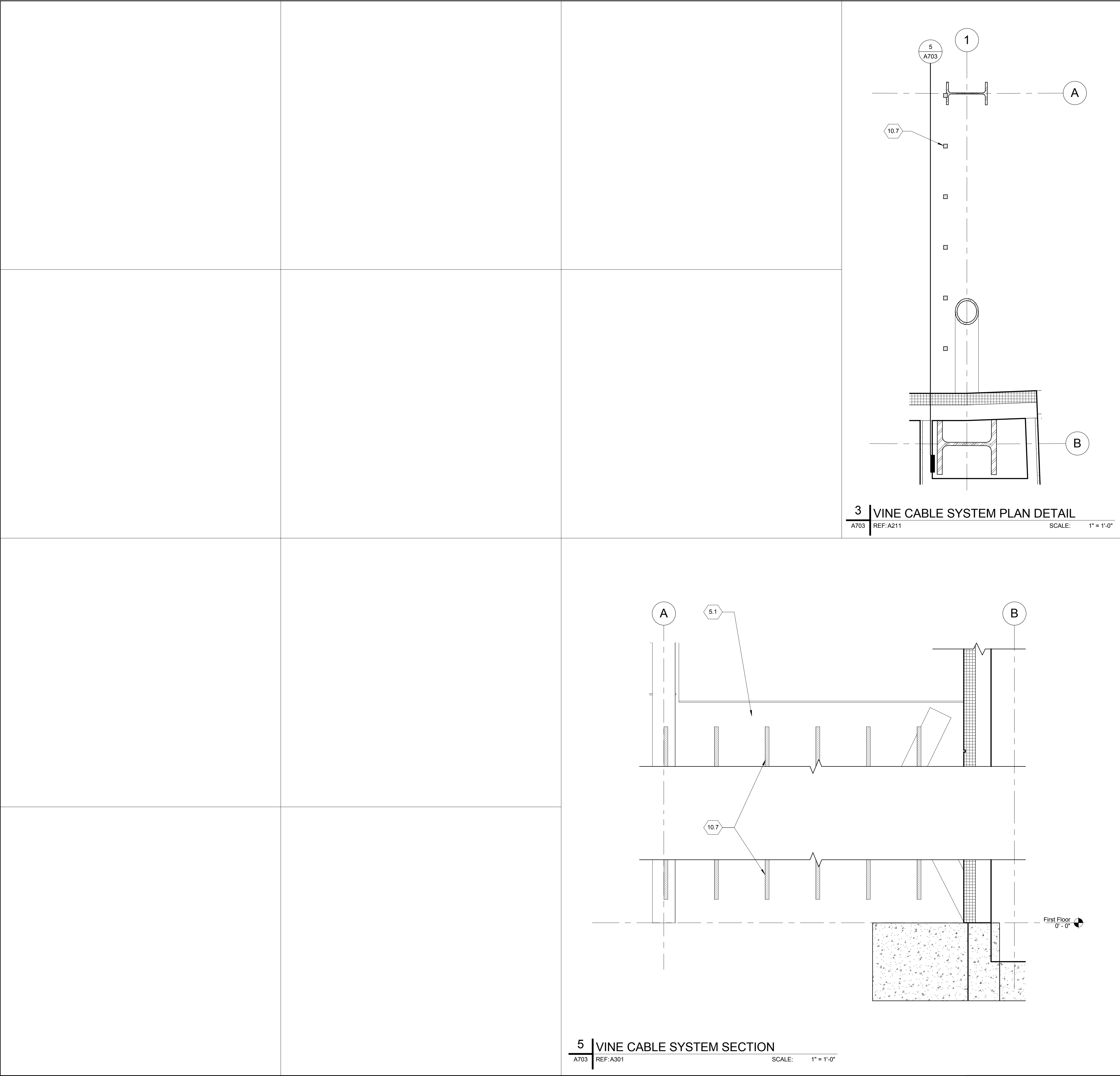
PROJECT STATUS		PRELIMINARY - NOT FOR CONSTRUCTION								
ISSUE										
1	10/20/2008	30% PRICING								
2	11/07/2008	30% DESIGN REVISION								
3	12/12/2008	60% INTERNAL QA/QC & COST ESTIMATE								
4	12/19/2008	60% PRE-FINAL, NASA REVIEW								
5	01/19/2009	60% FINAL ISSUE TO NASA								
6	02/16/2009	90% QA/QC & COST ESTIMATE								
MARK	DATE	DESCRIPTION								
DRAWN	G JOHNSON	<div><div>Ames Research Center Moffet Field, California</div></div> <div>N232 COLLABORATIVE SUPPORT FACILITY</div> <div>EXTERIOR DETAILS</div>								
DESIGNED	WM+P									
CHECKED	R PRADHAN									
PROJ MGR										
REQUESTOR										
R&GA										
SAFETY										
SUPERVISOR		<table><tr><td>SIZE</td><td>CAGE CODE</td><td rowspan="2">A232-0800-</td><td rowspan="2">A701</td><td rowspan="2">REV</td></tr><tr><td>D</td><td>25307</td></tr></table>		SIZE	CAGE CODE	A232-0800-	A701	REV	D	25307
SIZE	CAGE CODE	A232-0800-	A701	REV						
D	25307									
		INDEX	SHEET	OF						

2/16/2009 6:15:59 PM



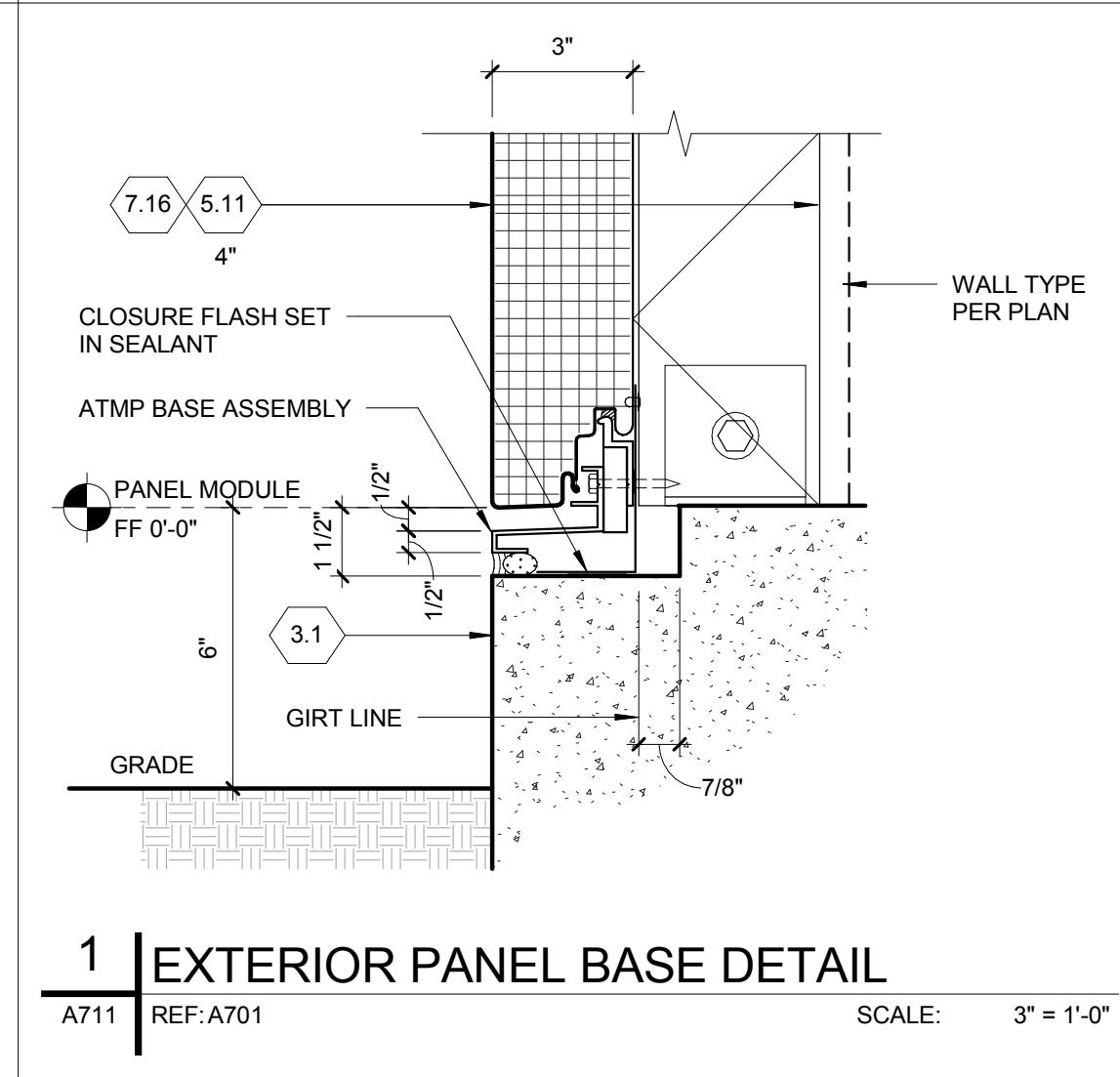
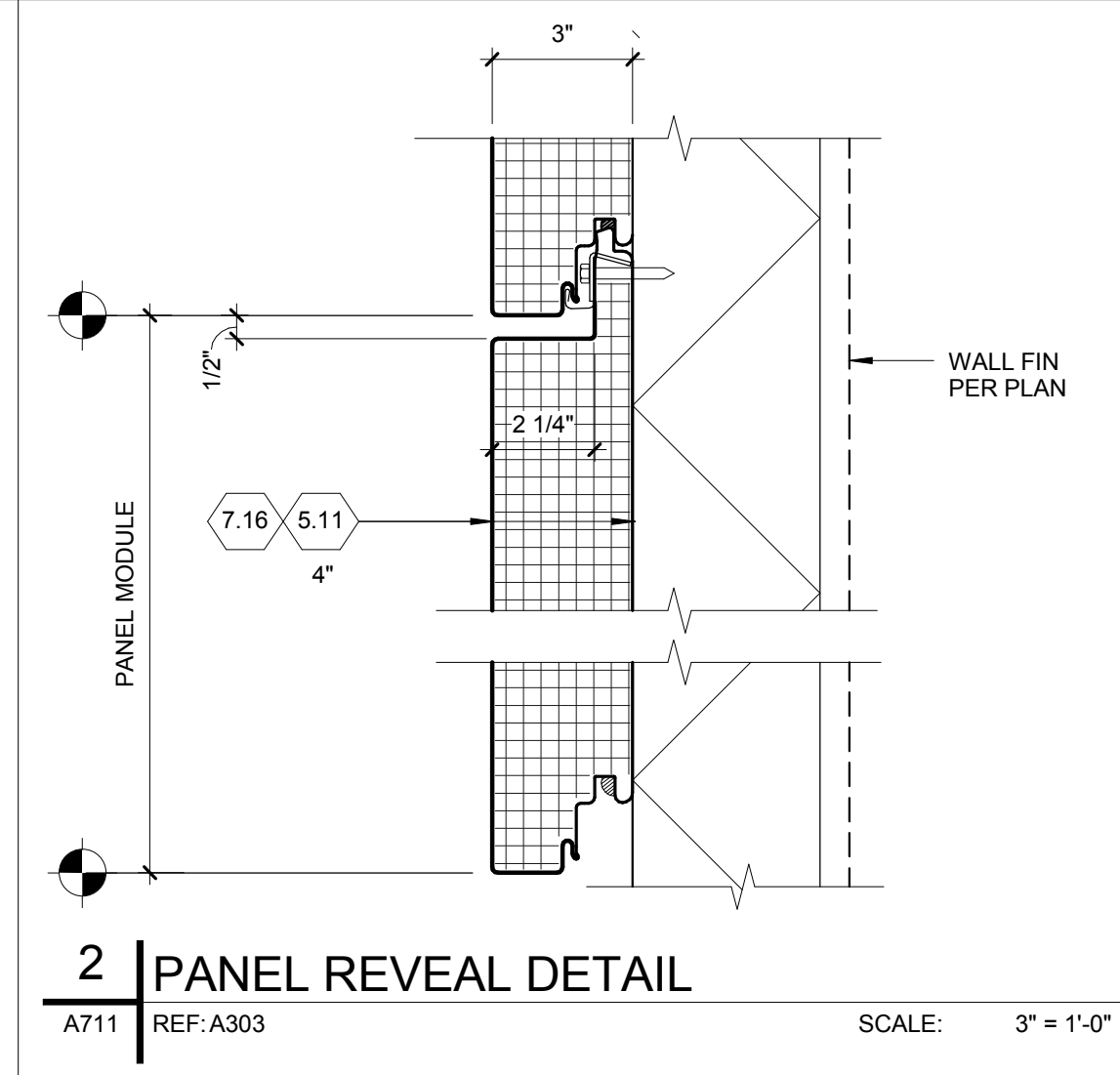
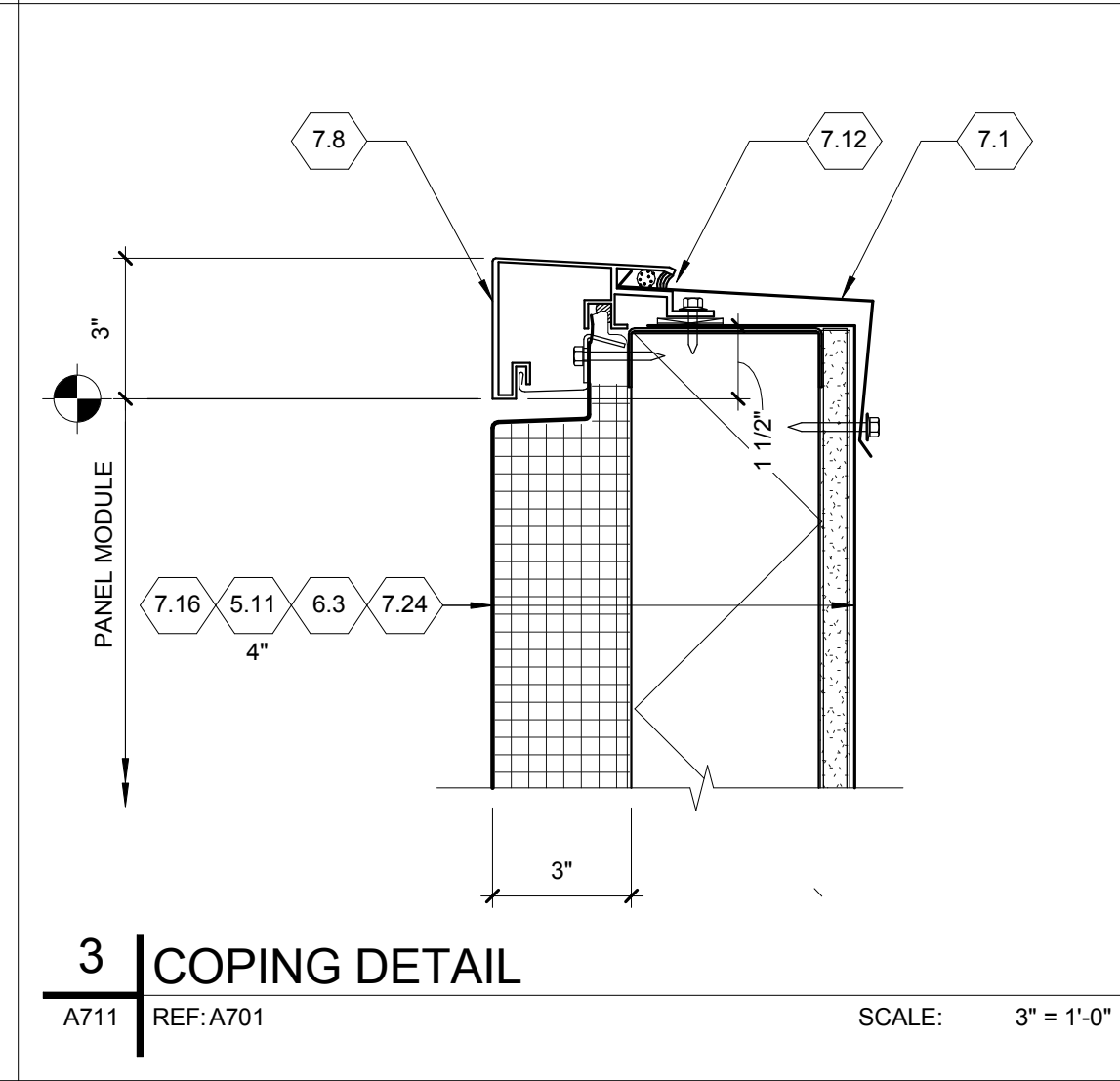
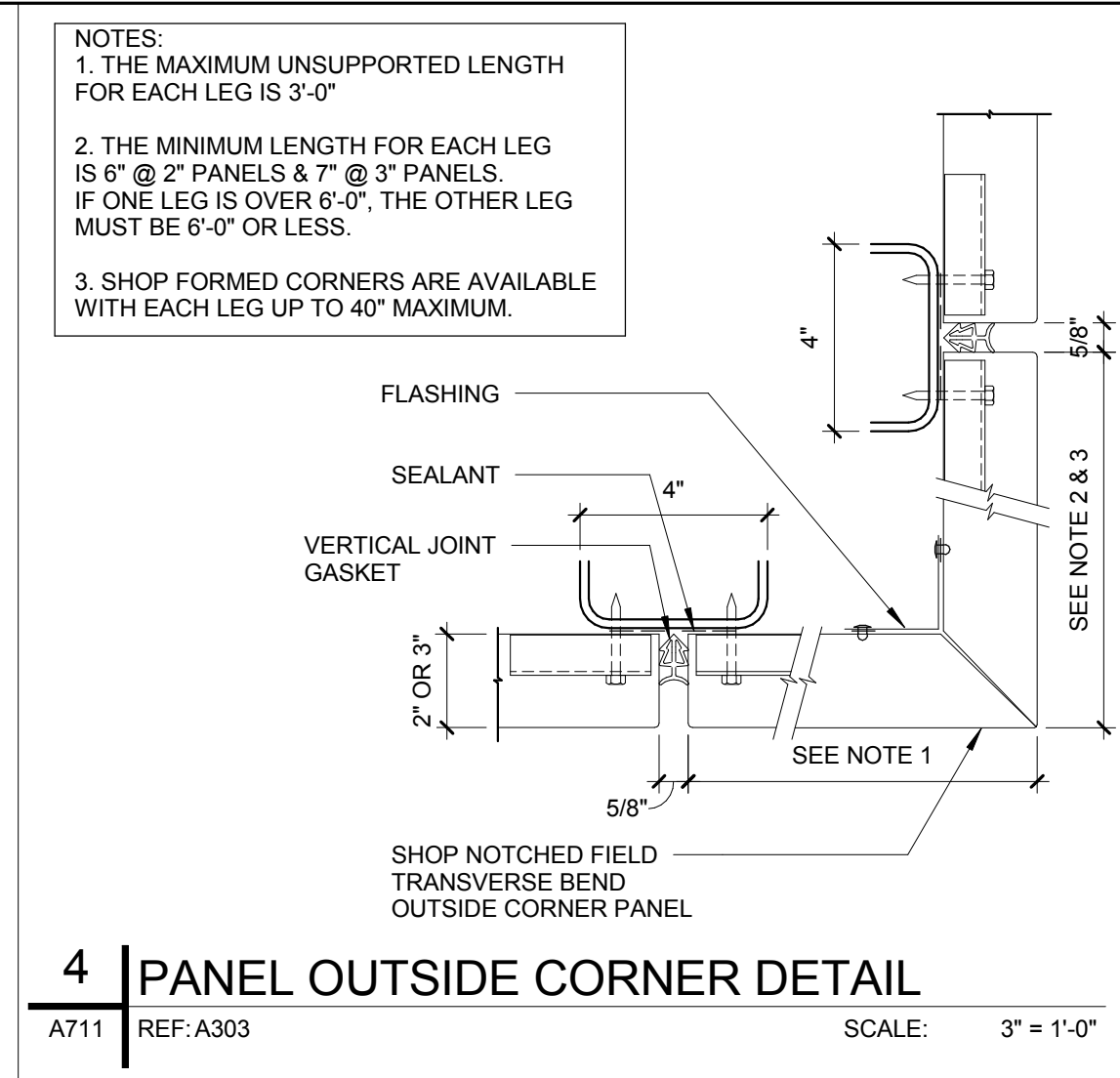
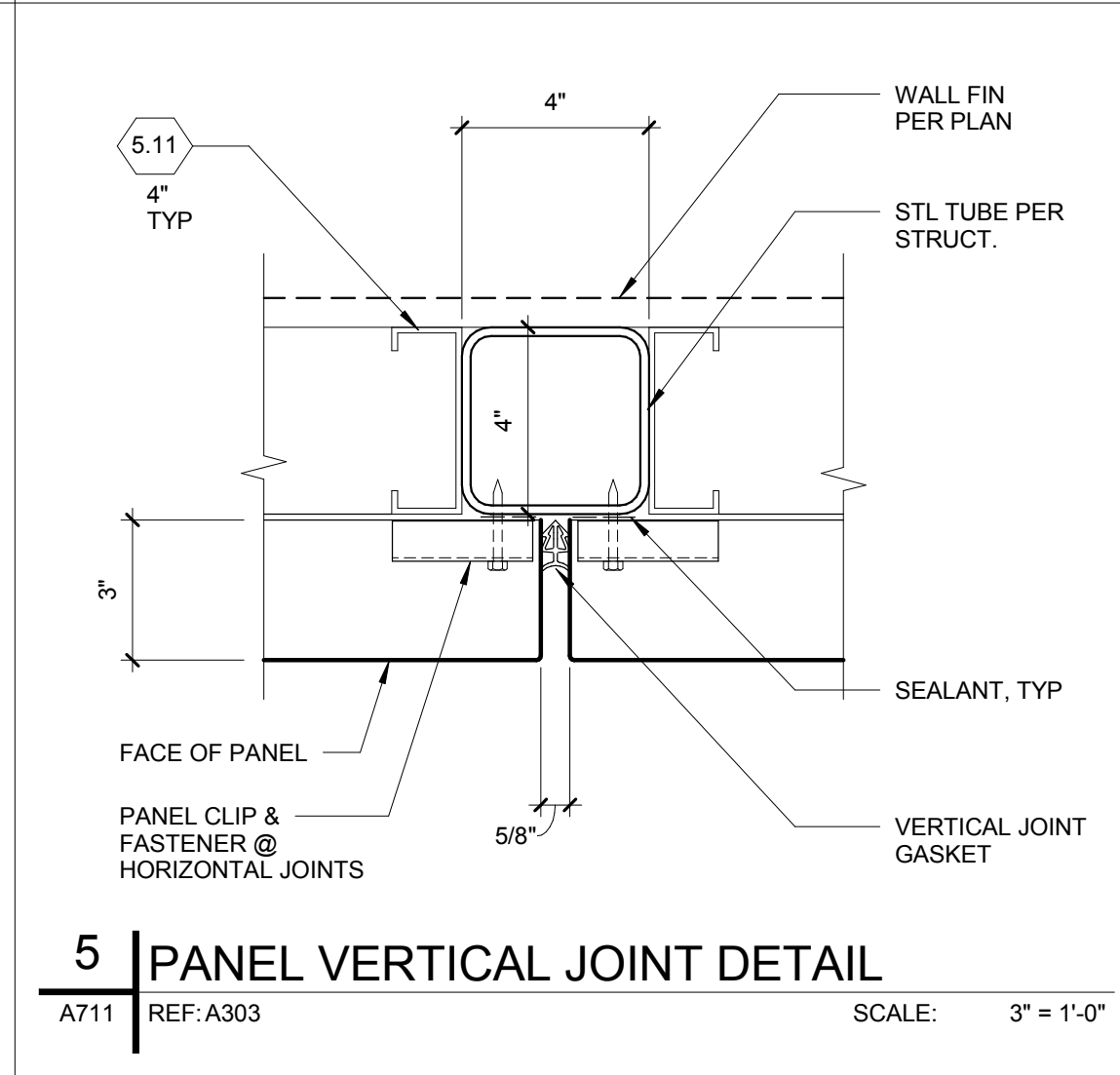
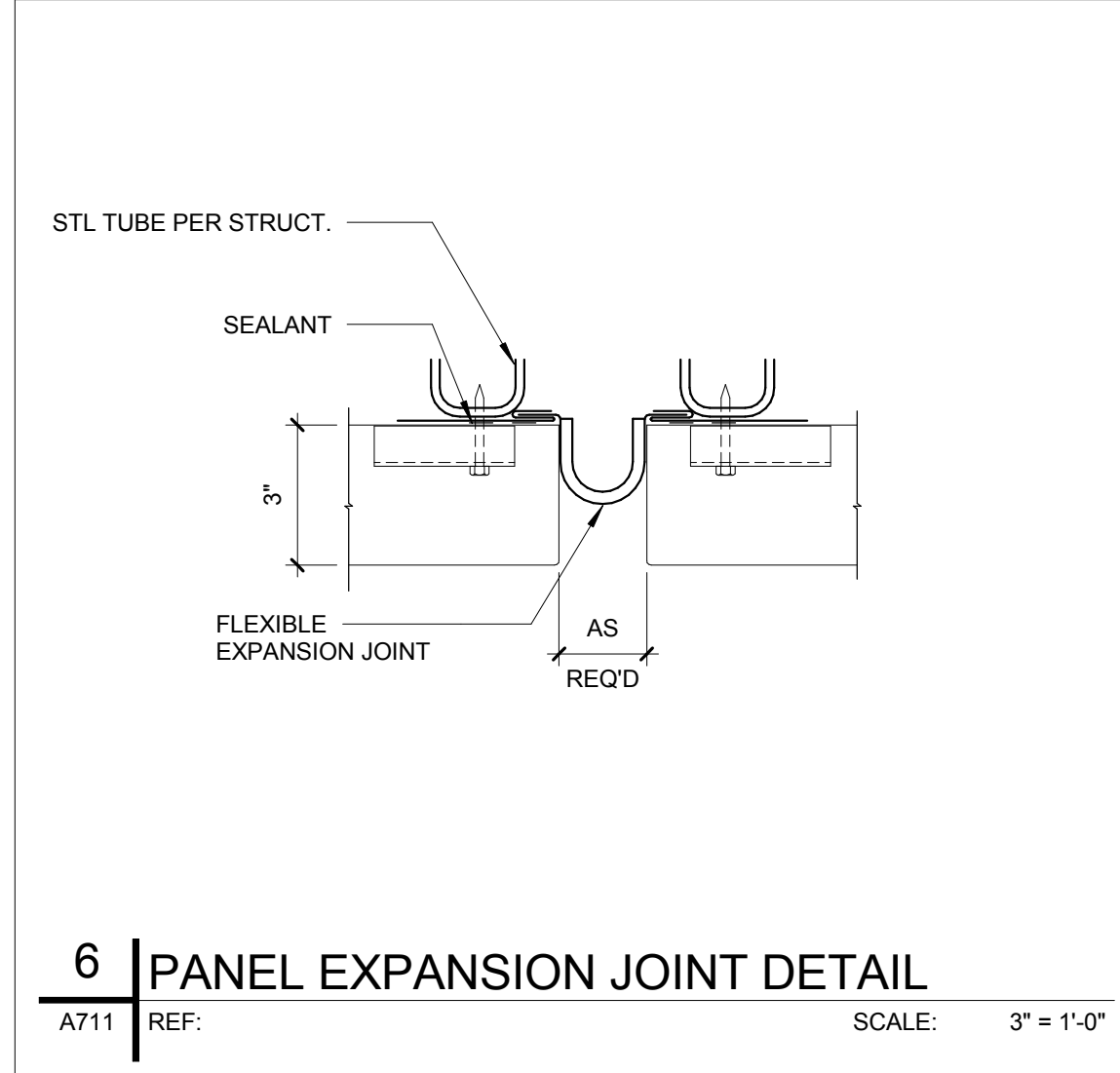
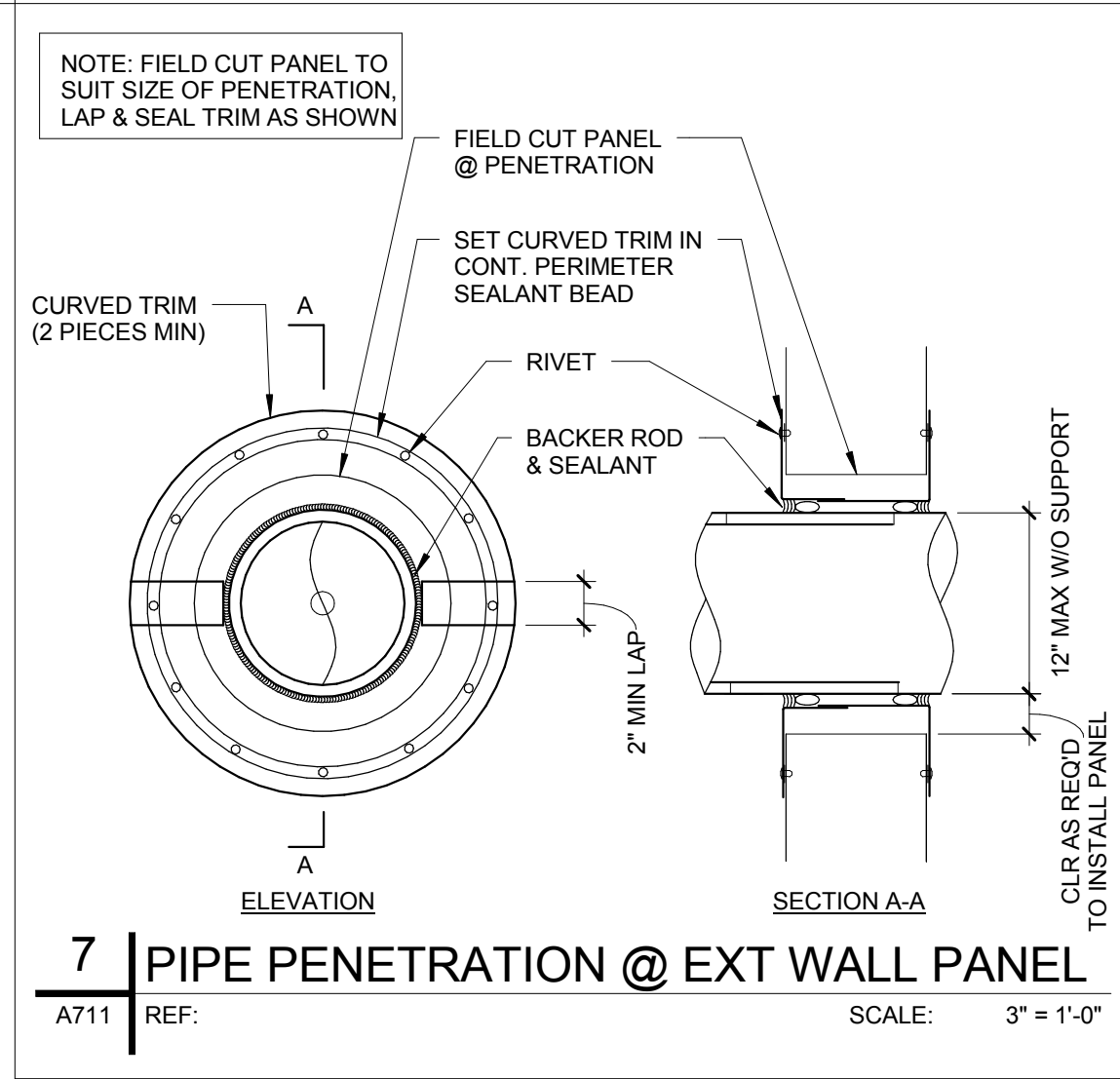
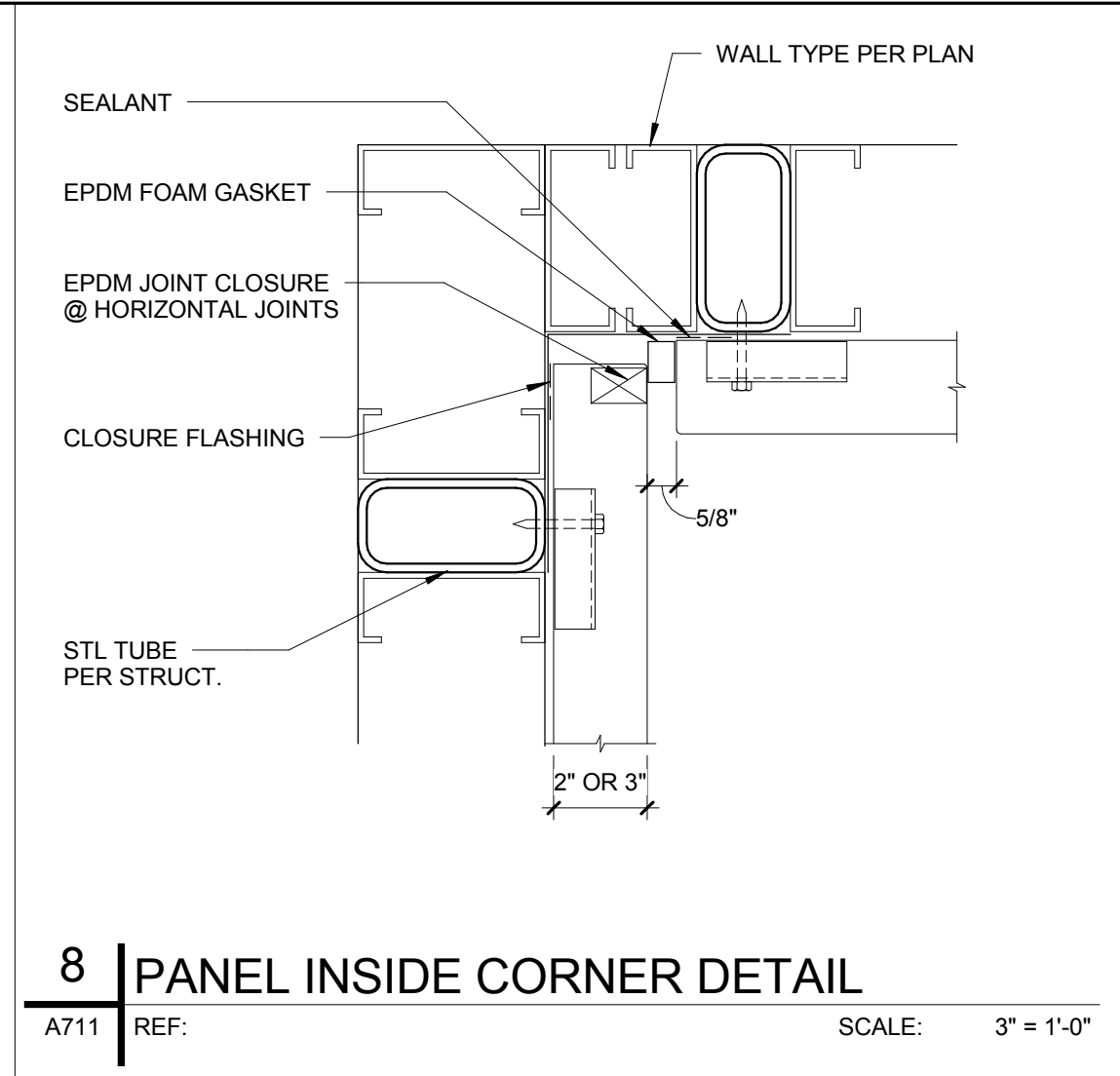
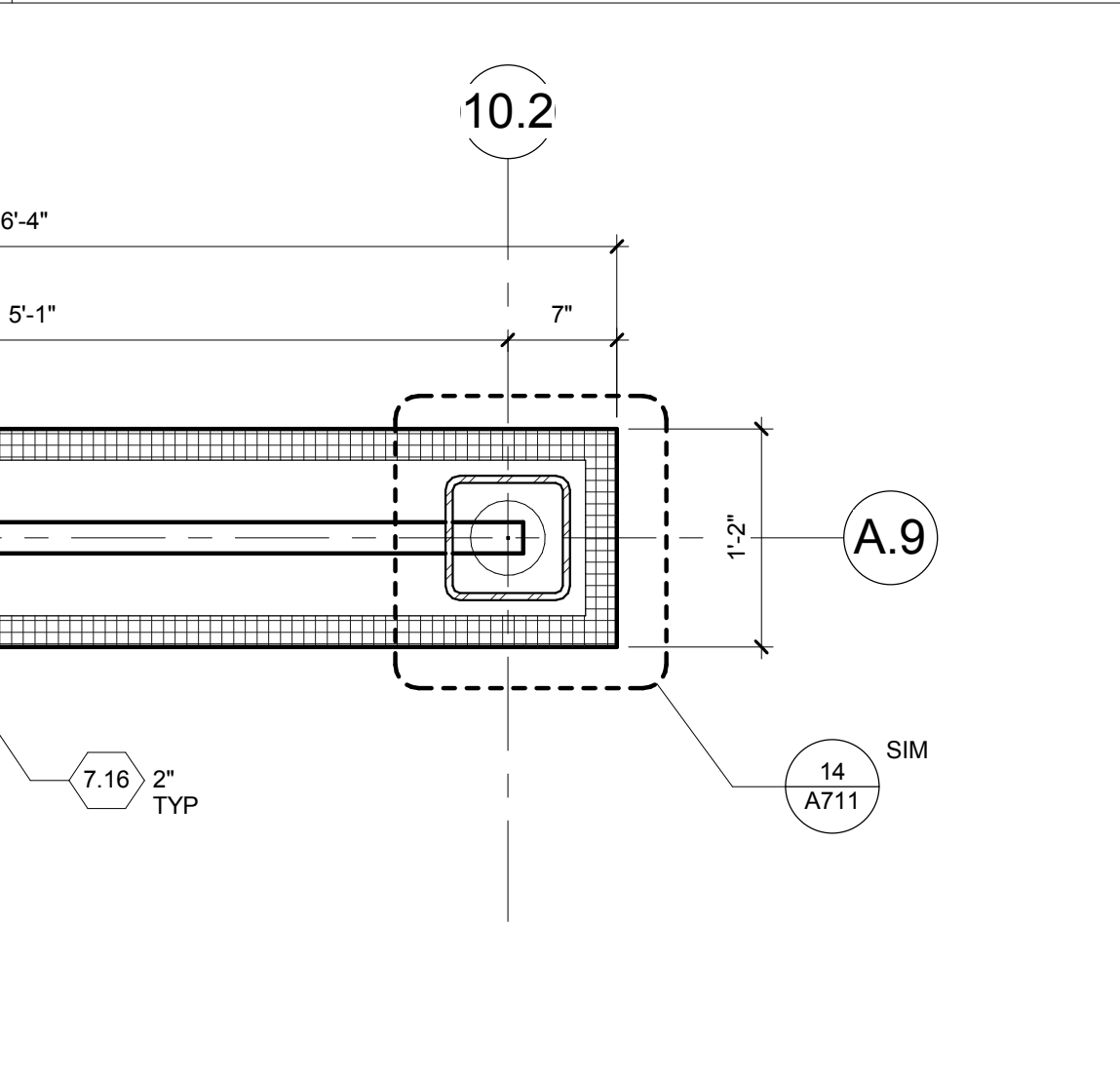
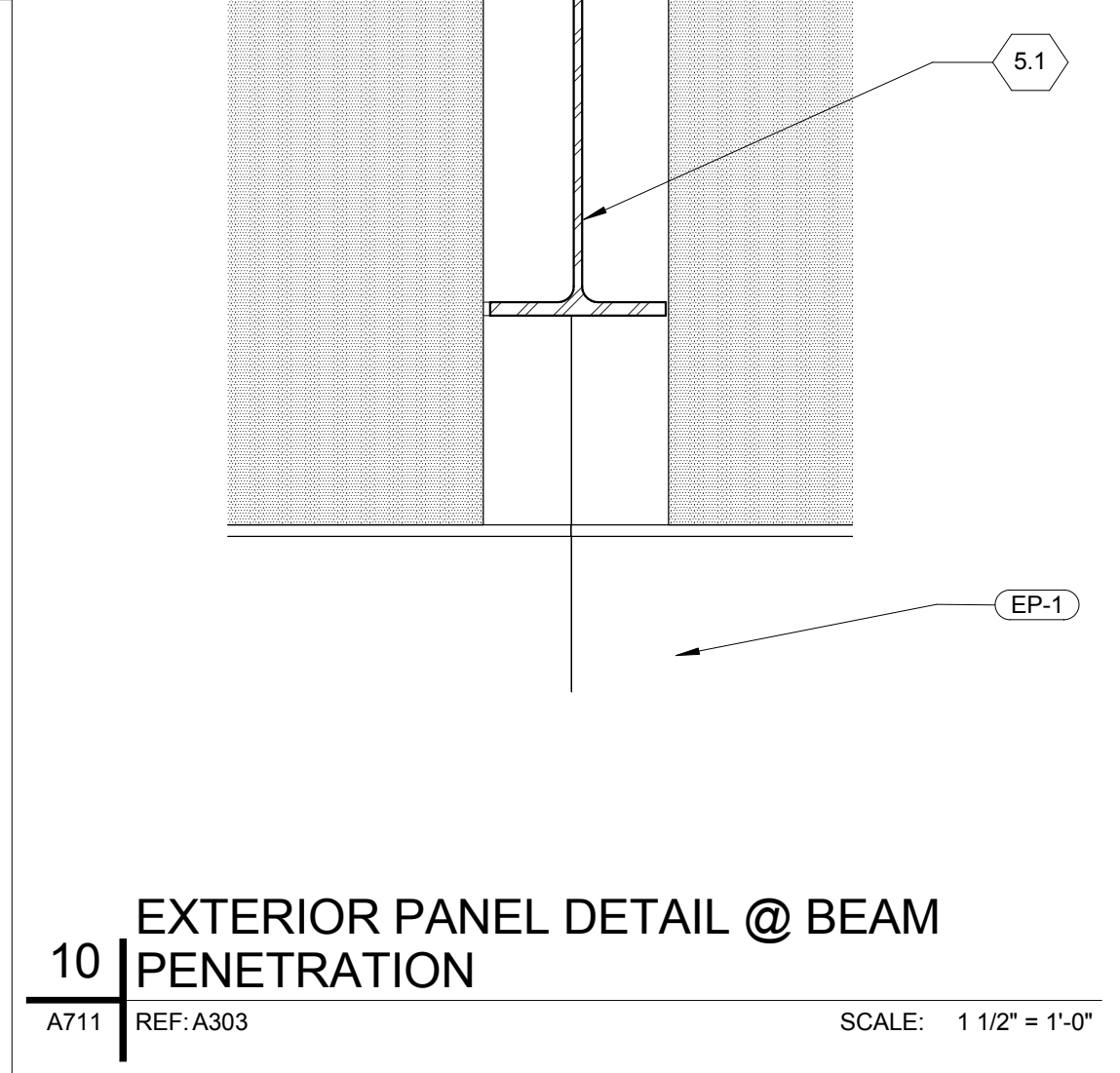
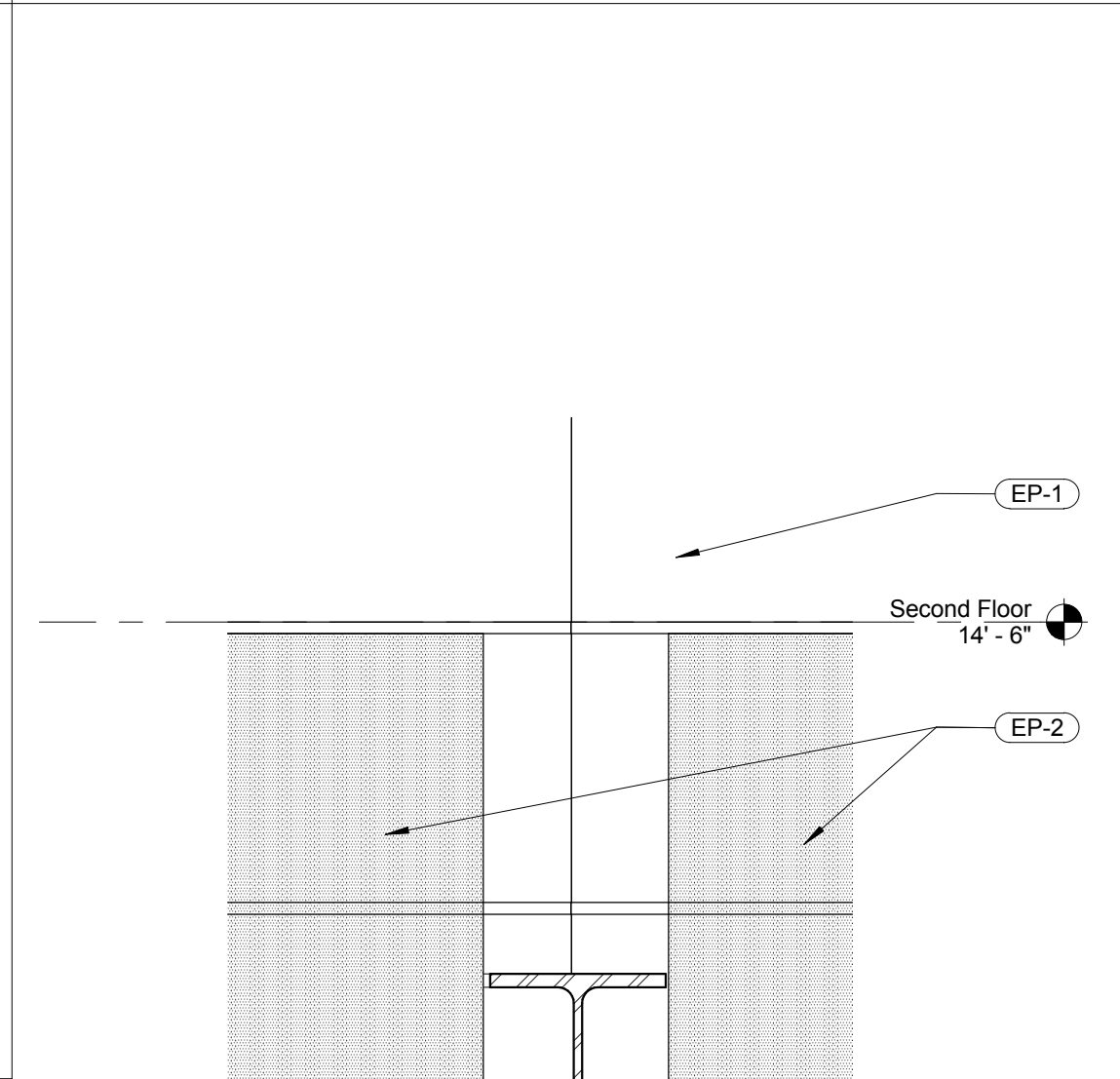
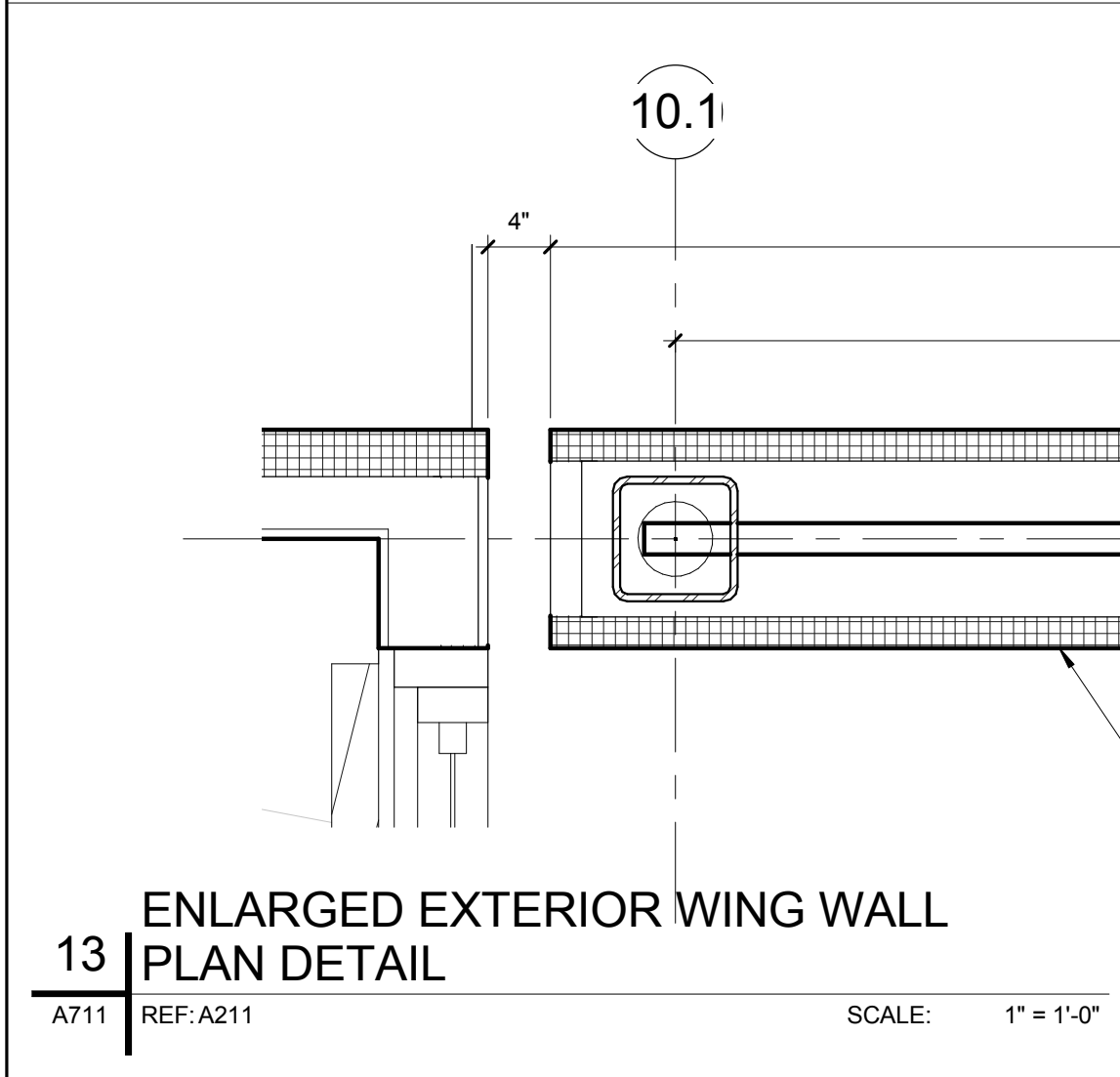
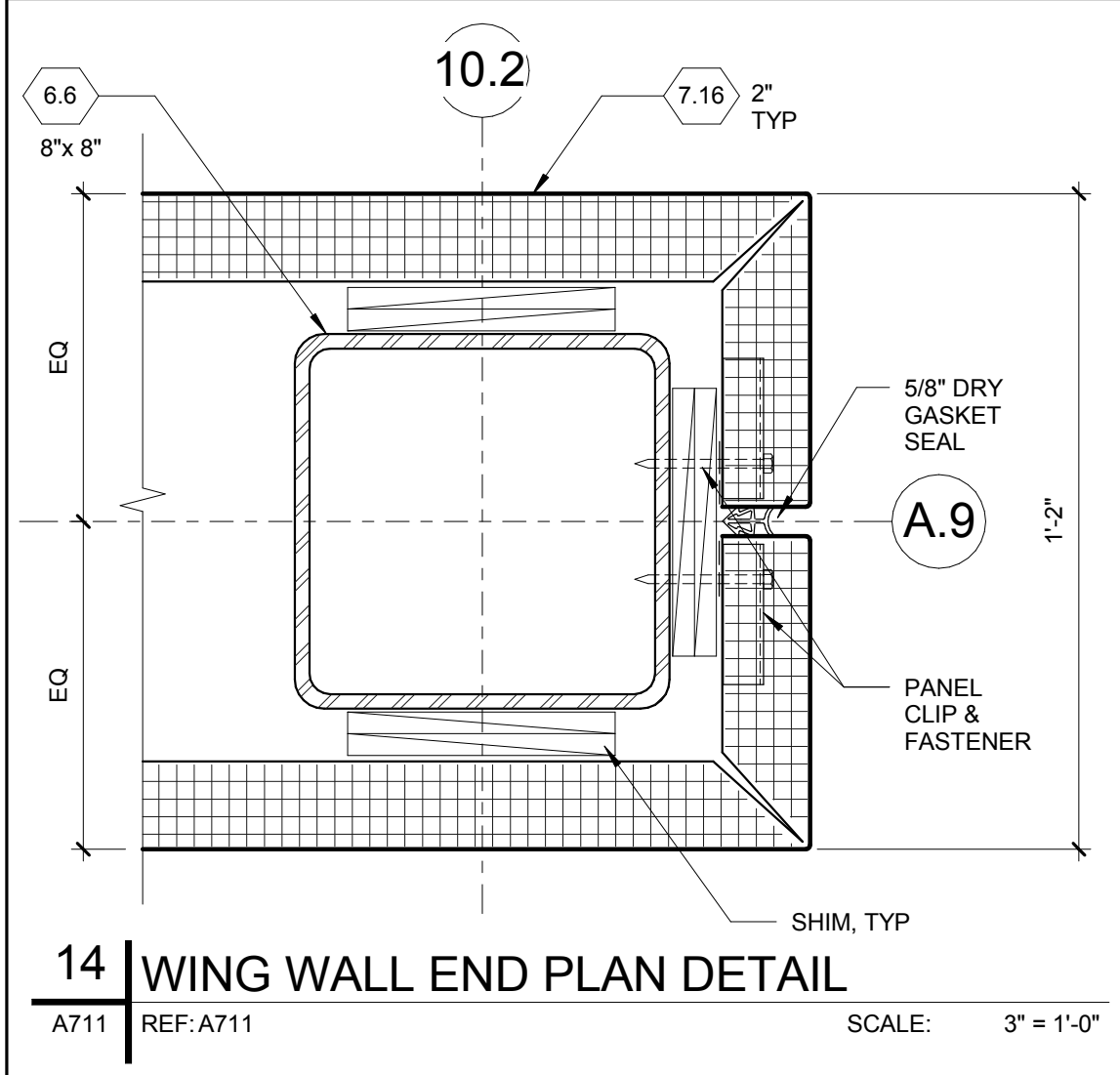
MATERIAL KEYNOTES			
DIVISION 03 - CONCRETE		DIVISION 10 - SPECIALTIES	
3.1	CAST IN PLACE CONCRETE	10.1	TOILET PARTITION
3.2	6" CONC HOUSEKEEPING PAD	10.2	FIXED SUNSCREEN (BIPV @ BID ALTERNATE)
3.3	VAPOR BARRIER	10.3	METAL LOCKER
3.4	GRANULAR FILL	10.4	FIRE EXTINGUISHER CABINET
3.5	CANE DETECTION AREA	10.5	DOOR STOP
DIVISION 05 - METALS		10.6	ALUM LIGHT SHELF (BID ALTERNATE)
5.1	STEEL BEAM	10.7	VINE CABLE SYSTEM
5.2	STEEL COLUMN	10.8	EXTRUDED ALUM LOUVER AIRFOIL
5.3	METAL DECK	10.9	NOT USED
5.4	STEEL ANGLE	10.10	ACCESS FLOORING- 10" HIGH
5.5	STEEL PLATE	DIVISION 11 - EQUIPMENT	
5.6	TUBULAR STEEL	11.1	MOTORIZED PROJECTION SCREEN
5.7	STEEL BENT PLATE	11.2	PROJECTOR
5.8	STAINLESS STEEL FRAME	DIVISION 12 - FURNISHINGS	
5.9	OPEN WEB STEEL JOIST	12.1	MOTORIZED WINDOW SHADE
5.10	NOT USED	12.2	SYSTEM FURNITURE, NIC
5.11	EXT. COLD FORMED METAL FRAMING, SEE STRUCT.	12.3	ENTRANCE FLOOR MAT & FRAME
5.12	NOT USED	DIVISION 14 - EQUIPMENT	
5.13	GUARDRAIL	14.1	HYDRAULIC HOLELESS ELEVATOR, 3500 LB
5.14	HANDRAIL	DIVISION 22 - PLUMBING	
5.15	METAL FRAMED STAIR	22.1	ROOF DRAIN
5.16	TEEL CHANNEL	22.2	OVERFLOW SCUPPER
5.17	VISUALLY CONTRASTING STAINLESS STEEL STRIP, SEE SHEET 1/A002 FOR ACCESSIBILITY REQUIREMENTS	22.3	VENT THROUGH ROOF
DIVISION 06 - WOOD, PLASTIC & COMPOSITES		22.4	ELECTRIC WATER COOLER
6.1	WOOD BLOCK/NAILER, PRESSURE TREATED	22.5	KITCHEN SINK
6.2	3/4" PLYWOOD, FIRE RETARDANT TREATED	22.6	SERVICE SINK
6.3	5/8" GLASS MAT FACED GYP SHEATHING	22.7	FLOOR DRAIN
6.4	PLASTIC LAMINATE	22.8	FILTERED WATER SYSTEM FAUCET
6.5	SOLID-SURFACING MATERIAL COUNTERTOP	22.9	DUAL FLUSH TOILET @ WOMEN'S
6.6	RECYCLED WOOD TREAD	22.10	HIGH EFFICIENCY TOILET @ MEN'S
DIVISION 07 - THERMAL & MOISTURE PROTECTION		22.11	LOW CONSUMPTION URINAL
7.1	STAINLESS STEEL FLASHING/COUNTERFLASHING	22.12	COUNTERTOP SINK
7.2	THERMOPLASTIC MEMBRANE ROOFING	22.13	ELECTRONIC LAVATORY FAUCET, TYP.
7.3	MEMBRANE EDGE FASTENER @ 12" O/C	22.14	HAND SHOWER SET WITH SLIDE BAR
7.4	SAND COATED ROOF WALKWAY	22.15	URINAL ELECTRONIC FLUSH VALVE
7.5	RIGID ROOF INSULATION OF AGED R=30 (UON)	DIVISION 23 - HVAC	
7.6	BATT INSULATION R=19	23.1	BOILER FLUE
7.7	PVC MEMBRANE FLASHING	23.2	DUCT
7.8	EXTRUDED ALUM TRIM	23.3	PERIMETER HYDRONIC HEATER
7.9	ALUM FLASHING	23.4	FIRE DAMPER
7.10	FORMED SHEET SS COPING	23.5	RADIANT CEILING PANEL
7.11	BELOW GRADE DAMP/WATERPROOFING	23.6	MECHANICAL SHAFT OPENING
7.12	SEALANT WITH BACKER ROD	23.7	RADIANT FLOOR SLAB SYSTEM
7.13	20 GA GALVANIZED SPLASH PAN	DIVISION 08 - OPENINGS	
7.14	DOWN SPOUT	8.1	DOOR & FRAME
7.15	WATERPROOFING MEMBRANE	8.2	MOTORIZED OPERABLE WINDOW
7.16	INSULATED METAL PANEL CLADDING	8.3	MANUAL OPERABLE WINDOW
7.17	ROOF SEISMIC JOINT COVER	8.4	AUTOMATIC DOOR BOTTOM
7.18	EXTERIOR WALL SEISMIC JOINT COVER	8.5	THRESHOLD
7.19	INTERIOR WALL SEISMIC JOINT COVER	8.6	GLAZED ALUM CURTAIN WALL SYSTEM
7.20	CEILING SEISMIC JOINT COVER	8.7	1" INSULATED GLAZING
7.21	FIRESTOPPING	8.8	FRITTED GLAZING
7.22	SAND COATED ROOF WALKWAY	8.9	SPANDREL GLAZING
7.23	METAL SPANDREL PANEL (INSULATED)	8.10	VISION GLASS (SAFETY WHERE REQUIRED)
7.24	THERMOPLASTIC MEMBRANE PARAPET FLASHING	8.11	RECYCLED GLAZING
7.25	THERMOPLASTIC MEMBRANE COVER STRIP, HOT-AIR WELDED	8.12	AUTOMATIC ENTRANCE DOOR
7.26	EXTRUDED ALUM BAR W/ FASTENERS @ 12" O.C. MAX	8.13	SKYLIGHT
7.27	FLOOR SEISMIC JOINT COVER	8.14	WEATHERSTRIPPING
7.28	S.S. PERFORATED RIBBED METAL (20 GA)	8.15	MTL SECURITY GATE
7.29	METAL PANEL SOFFIT	8.16	DOOR PULL
DIVISION 09 - FINISHES		9.1	1/2" GWB TYPE X
9.1	1/2" GWB TYPE X	9.2	5/8" GWB TYPE X
9.2	5/8" GWB TYPE X	9.3	1" GWB SHAFT LINER
9.3	1" GWB SHAFT LINER	9.4	20 GA MTL STUD @ 16" O/C
9.4	20 GA MTL STUD @ 16" O/C	9.5	SLOTTED TOP TRACK
9.5	SLOTTED TOP TRACK	9.6	METAL STUD TRACK
9.6	METAL STUD TRACK	9.7	COLD FORMED FURRING CHANNEL
9.7	COLD FORMED FURRING CHANNEL	9.8	SHAFT WALL STUD MIN 20 GA @ 24" O/C
9.8	SHAFT WALL STUD MIN 20 GA @ 24" O/C	9.9	FRAMING ANGLE, MIN 20 GA GALV
9.9	FRAMING ANGLE, MIN 20 GA GALV	9.10	FURRING CHANNEL MIN 20 GA, SIZE AS NOTED
9.10	FURRING CHANNEL MIN 20 GA, SIZE AS NOTED	9.11	SHAFT J RUNNER
9.11	SHAFT J RUNNER	9.12	CERAMIC TILE
9.12	CERAMIC TILE	9.13	REINFORCED MORTAR SETTING BED
9.13	REINFORCED MORTAR SETTING BED	9.14	SCHEDULED FLOORING
9.14	SCHEDULED FLOORING	9.15	SUSPENDED GYP BOARD CEILING SYSTEM
9.15	SUSPENDED GYP BOARD CEILING SYSTEM	9.16	SCHEDULED WALL BASE
9.16	SCHEDULED WALL BASE	9.17	PAINT
9.17	PAINT	9.18	5/8" CEMENTITIOUS TILE BACKER BOARD
9.18	5/8" CEMENTITIOUS TILE BACKER BOARD	9.19	5/8" GLASS MAT FACED TILE BACKER BOARD
9.19	5/8" GLASS MAT FACED TILE BACKER BOARD	9.20	NOT USED
9.20	NOT USED	9.21	SOUND ATTENUATION BLANKET
9.21	SOUND ATTENUATION BLANKET	9.22	ACOUSTICAL INSULATION 3" (UON)
9.22	ACOUSTICAL INSULATION 3" (UON)	9.23	SUSPENDED ACOUSTICAL CEILING
PROJECT STATUS			
PRELIMINARY - NOT FOR CONSTRUCTION			
ISSUE			
1	10/20/2008	30% PRICING	
2	11/07/2008	30% DESIGN REVISION	
3	12/12/2008	60% INTERNAL QA/QC & COST ESTIMATE	
4	12/19/2008	60% PRE-FINAL, NASA REVIEW	
5	01/19/2009	60% FINAL ISSUE TO NASA	
6	02/16/2009	90% QAQC & COST ESTIMATE	
MARK	DATE	DESCRIPTION	
DRAWN	G JOHNSON	DATE	
DESIGNED	WMHP	DATE	
CHECKED	R PRADHAN	DATE	
PROJMR		DATE	
REQUESTOR		DATE	
R&GA		DATE	
SAFETY		DATE	
SUPERVISOR		DATE	
SIZE	CASE CODE	A232-0800-	A702
D	25307		
SCALE	INDEX	SHEET	OF

2/16/2009 6:16:00 PM



MATERIAL KEYNOTES				
<div><div>DIVISION 03 - CONCRETE</div><div>3.1 CAST IN PLACE CONCRETE</div><div>3.2 6" CONC HOUSEKEEPING PAD</div><div>3.3 VAPOR BARRIER</div><div>3.4 GRANULAR FILL</div><div>3.5 CANE DETECTION AREA</div><div>DIVISION 05 - METALS</div><div>5.1 STEEL BEAM</div><div>5.2 STEEL COLUMN</div><div>5.3 METAL DECK</div><div>5.4 STEEL ANGLE</div><div>5.5 STEEL PLATE</div><div>5.6 TUBULAR STEEL</div><div>5.7 STEEL BENT PLATE</div><div>5.8 STAINLESS STEEL FRAME</div><div>5.9 OPEN WEB STEEL JOIST</div><div>5.10 NOT USED</div><div>5.11 EXT. COLD FORMED METAL FRAMING, SEE STRUCT.</div><div>5.12 NOT USED</div><div>5.13 GUARDRAIL</div><div>5.14 HANDRAIL</div><div>5.15 METAL FRAMED STAIR</div><div>5.16 TEEL CHANNEL</div><div>5.17 VISUALLY CONTRASTING STAINLESS STEEL STRIP, SEE SHEET 1/A002 FOR ACCESSIBILITY REQUIREMENTS</div><div>DIVISION 06 - WOOD, PLASTIC & COMPOSITES</div><div>6.1 WOOD BLOCK/NAILER, PRESSURE TREATED</div><div>6.2 3/4" PLYWOOD, FIRE RETARDANT TREATED</div><div>6.3 5/8" GLASS MAT FACED GYP SHEATHING</div><div>6.4 PLASTIC LAMINATE</div><div>6.5 SOLID-SURFACING MATERIAL COUNTERTOP</div><div>6.6 RECYCLED WOOD TREAD</div><div>DIVISION 07 - THERMAL & MOISTURE PROTECTION</div><div>7.1 STAINLESS STEEL FLASHING/COUNTERFLASHING</div><div>7.2 THERMOPLASTIC MEMBRANE ROOFING</div><div>7.3 MEMBRANE EDGE FASTENER @ 12" O/C</div><div>7.4 SAND COATED ROOF WALKWAY</div><div>7.5 RIGID ROOF INSULATION OF AGED R=30 (UON)</div><div>7.6 BATT INSULATION R=19</div><div>7.7 PVC MEMBRANE FLASHING</div><div>7.8 EXTRUDED ALUM TRIM</div><div>7.9 ALUM FLASHING</div><div>7.10 FORMED SHEET SS COPING</div><div>7.11 BELOW GRADE DAMP/WATERPROOFING</div><div>7.12 SEALANT WITH BACKER ROD</div><div>7.13 20 GA GALVANIZED SPLASH PAN</div><div>7.14 DOWN SPOUT</div><div>7.15 WATERPROOFING MEMBRANE</div><div>7.16 INSULATED METAL PANEL CLADDING</div><div>7.17 ROOF SEISMIC JOINT COVER</div><div>7.18 EXTERIOR WALL SEISMIC JOINT COVER</div><div>7.19 INTERIOR WALL SEISMIC JOINT COVER</div><div>7.20 CEILING SEISMIC JOINT COVER</div><div>7.21 FIRESTOPPING</div><div>7.22 SAND COATED ROOF WALKWAY</div><div>7.23 METAL SPANDREL PANEL (INSULATED)</div><div>7.24 THERMOPLASTIC MEMBRANE PARAPET FLASHING</div><div>7.25 THERMOPLASTIC MEMBRANE COVER STRIP, HOT-AIR WELDED</div><div>7.26 EXTRUDED ALUM BAR W/ FASTENERS @ 12" O.C.MAX</div><div>7.27 FLOOR SEISMIC JOINT COVER</div><div>7.28 S.S. PERFORATED RIBBED METAL (20 GA)</div><div>7.29 METAL PANEL SOFFIT</div><div>DIVISION 08 - OPENINGS</div><div>8.1 DOOR & FRAME</div><div>8.2 MOTORIZED OPERABLE WINDOW</div><div>8.3 MANUAL OPERABLE WINDOW</div><div>8.4 AUTOMATIC DOOR BOTTOM</div><div>8.5 THRESHOLD</div><div>8.6 GLAZED ALUM CURTAIN WALL SYSTEM</div><div>8.7 1" INSULATED GLAZING</div><div>8.8 FRITTED GLAZING</div><div>8.9 SPANDREL GLAZING</div><div>8.10 VISION GLASS (SAFETY WHERE REQUIRED)</div><div>8.11 RECYCLED GLAZING</div><div>8.12 AUTOMATIC ENTRANCE DOOR</div><div>8.13 SKYLIGHT</div><div>8.14 WEATHERSTRIPPING</div><div>8.15 MTL SECURITY GATE</div><div>8.16 DOOR PULL</div><div>DIVISION 09 - FINISHES</div><div>9.1 1/2" GWB TYPE X</div><div>9.2 5/8" GWB TYPE X</div><div>9.3 1" GWB SHAFT LINER</div><div>9.4 20 GA MTL STUD @ 16" O/C</div><div>9.5 SLOTTED TOP TRACK</div><div>9.6 METAL STUD TRACK</div><div>9.7 COLD FORMED FURRING CHANNEL</div><div>9.8 SHAFT WALL STUD MIN 20 GA @ 24" O/C</div><div>9.9 FRAMING ANGLE, MIN 20 GA GALV</div><div>9.10 FURRING CHANNEL MIN 20 GA, SIZE AS NOTED</div><div>9.11 SHAFT J RUNNER</div><div>9.12 CERAMIC TILE</div><div>9.13 REINFORCED MORTAR SETTING BED</div><div>9.14 SCHEDULED FLOORING</div><div>9.15 SUSPENDED GYP BOARD CEILING SYSTEM</div><div>9.16 SCHEDULED WALL BASE</div><div>9.17 PAINT</div><div>9.18 5/8" CEMENTITIOUS TILE BACKER BOARD</div><div>9.19 5/8" GLASS MAT FACED TILE BACKER BOARD</div><div>9.20 NOT USED</div><div>9.21 SOUND ATTENUATION BLANKET</div><div>9.22 ACOUSTICAL INSULATION 3" (UON)</div><div>9.23 SUSPENDED ACOUSTICAL CEILING</div><div>DIVISION 10 - SPECIALTIES</div><div>10.1 TOILET PARTITION</div><div>10.2 FIXED SUNSCREEN (BIPV @ BID ALTERNATE)</div><div>10.3 METAL LOCKER</div><div>10.4 FIRE EXTINGUISHER CABINET</div><div>10.5 DOOR STOP</div><div>10.6 ALUM LIGHT SHELF (BID ALTERNATE)</div><div>10.7 VINE CABLE SYSTEM</div><div>10.8 EXTRUDED ALUM LOUVER AIRFOIL</div><div>10.9 NOT USED</div><div>10.10 ACCESS FLOORING- 10" HIGH</div><div>DIVISION 11 - EQUIPMENT</div><div>11.1 MOTORIZED PROJECTION SCREEN</div><div>11.2 PROJECTOR</div><div>DIVISION 12 - FURNISHINGS</div><div>12.1 MOTORIZED WINDOW SHADE</div><div>12.2 SYSTEM FURNITURE, NIC</div><div>12.3 ENTRANCE FLOOR MAT & FRAME</div><div>DIVISION 14 - EQUIPMENT</div><div>14.1 HYDRAULIC HOLELESS ELEVATOR, 3500 LB</div><div>DIVISION 22- PLUMBING</div><div>22.1 ROOF DRAIN</div><div>22.2 OVERFLOW SCUPPER</div><div>22.3 VENT THROUGH ROOF</div><div>22.4 ELECTRIC WATER COOLER</div><div>22.5 KITCHEN SINK</div><div>22.6 SERVICE SINK</div><div>22.7 FLOOR DRAIN</div><div>22.8 FILTERED WATER SYSTEM FAUCET</div><div>22.9 DUAL FLUSH TOILET @ WOMEN'S</div><div>22.10 HIGH EFFICIENCY TOILET @ MEN'S</div><div>22.11 LOW CONSUMPTION URINAL</div><div>22.12 COUNTERTOP SINK</div><div>22.13 ELECTRONIC LAVATORY FAUCET, TYP.</div><div>22.14 HAND SHOWER SET WITH SLIDE BAR</div><div>22.15 URINAL ELECTRONIC FLUSH VALVE</div><div>DIVISION 23 - HVAC</div><div>23.1 BOILER FLUE</div><div>23.2 DUCT</div><div>23.3 PERIMETER HYDRONIC HEATER</div><div>23.4 FIRE DAMPER</div><div>23.5 RADIANT CEILING PANEL</div><div>23.6 MECHANICAL SHAFT OPENING</div><div>23.7 RADIANT FLOOR SLAB SYSTEM</div></div>				
<div><div>PROJECT STATUS</div><div>PRELIMINARY - NOT FOR CONSTRUCTION</div><div>ISSUE</div><div><div>1</div><div>10/20/2008</div><div>30% PRICING</div></div><div><div>2</div><div>11/07/2008</div><div>30% DESIGN REVISION</div></div><div><div>3</div><div>12/12/2008</div><div>60% INTERNAL QA/QC & COST ESTIMATE</div></div><div><div>4</div><div>12/19/2008</div><div>60% PRE-FINAL, NASA REVIEW</div></div><div><div>5</div><div>01/19/2009</div><div>60% FINAL ISSUE TO NASA</div></div><div><div>6</div><div>02/16/2009</div><div>90% QAQC & COST ESTIMATE</div></div><div>MARK</div><div>DATE</div><div>DESCRIPTION</div><div>DRAWN</div><div>G JOHNSON</div><div>DATE</div><div>DESIGNED</div><div>WM+P</div><div>DATE</div><div>CHECKED</div><div>R PRADHAN</div><div>DATE</div><div>PROJMG</div><div>DATE</div><div>REQUESTOR</div><div>DATE</div><div>R&GA</div><div>DATE</div><div>SAFETY</div><div>DATE</div><div>SUPERVISOR</div><div>DATE</div><div>SIZE</div><div>D</div><div>CASE CODE</div><div>25307</div><div>A232-0800-</div><div>A703</div><div>REV</div><div>SCALE</div><div>INDEX</div><div>SHEET</div><div>OF</div></div>				

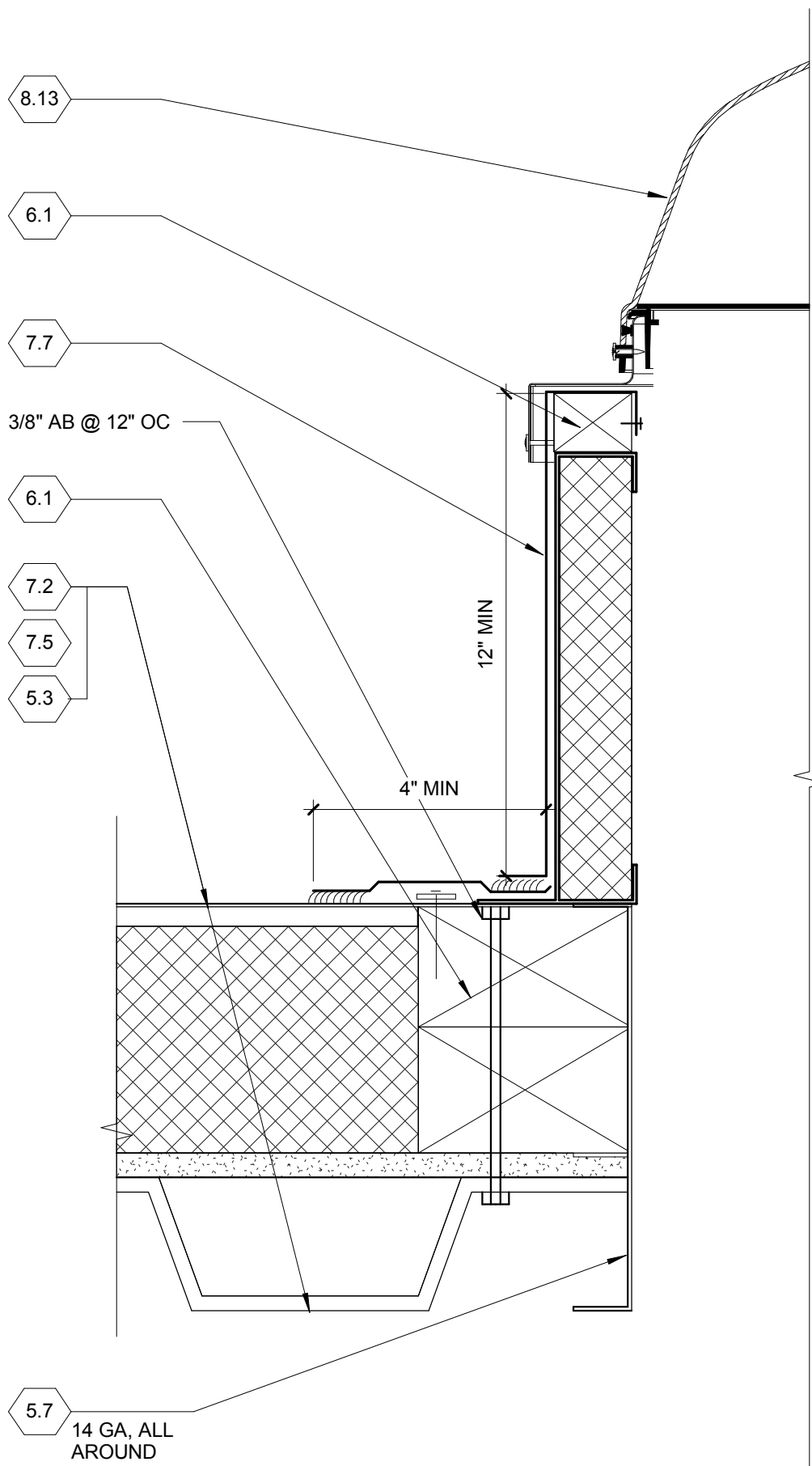
2/16/2009 6:16:03 PM



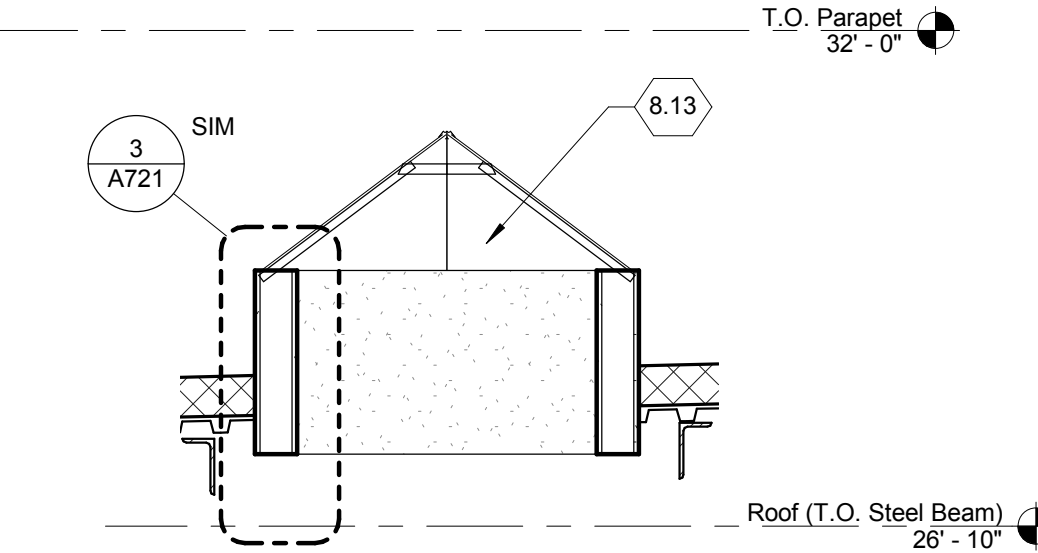
MATERIAL KEYNOTES									
DIVISION 03 - CONCRETE					DIVISION 10 - SPECIALTIES				
3.1	CAST IN PLACE CONCRETE	10.1	TOILET PARTITION		10.1	TOILET PARTITION			
3.2	6" CONC HOUSEKEEPING PAD	10.2	FIXED SUNSCREEN (BIPV @ BID ALTERNATE)		10.3	METAL LOCKER			
3.3	VAPOR BARRIER	10.4	FIRE EXTINGUISHER CABINET		10.5	DOOR STOP			
3.4	GRANULAR FILL	10.6	ALUM LIGHT SHELF (BID ALTERNATE)		10.7	VINE CABLE SYSTEM			
3.5	CANE DETECTION AREA	10.8	EXTRUDED ALUM LOUVER AIRFOIL		10.9	NOT USED			
DIVISION 05 - METALS					10.10	ACCESS FLOORING- 10" HIGH			
5.1	STEEL BEAM	DIVISION 11 - EQUIPMENT							
5.2	STEEL COLUMN	11.1	MOTORIZED PROJECTION SCREEN		11.2	PROJECTOR			
5.3	METAL DECK	DIVISION 12 - FURNISHINGS							
5.4	STEEL ANGLE	12.1	MOTORIZED WINDOW SHADE		12.2	SYSTEM FURNITURE, NIC			
5.5	STEEL PLATE	12.3	ENTRANCE FLOOR MAT & FRAME		DIVISION 14 - EQUIPMENT				
5.6	TUBULAR STEEL	14.1	HYDRAULIC HOLELESS ELEVATOR, 3500 LB		DIVISION 22 - PLUMBING				
5.7	STEEL BENT PLATE	22.1	ROOF DRAIN		22.2	OVERFLOW SCUPPER			
5.8	STAINLESS STEEL FRAME	22.3	VENT THROUGH ROOF		22.4	ELECTRIC WATER COOLER			
5.9	OPEN WEB STEEL JOIST	22.5	KITCHEN SINK		22.6	SERVICE SINK			
5.10	NOT USED	22.7	FLOOR DRAIN		22.8	FILTERED WATER SYSTEM FAUCET			
5.11	EXT. COLD FORMED METAL FRAMING, SEE STRUCT.	22.9	DUAL FLUSH TOILET @ WOMEN'S		22.10	HIGH EFFICIENCY TOILET @ MEN'S			
5.12	NOT USED	22.11	LOW CONSUMPTION URINAL		22.12	COUNTERTOP SINK			
5.13	GUARDRAIL	22.13	ELECTRONIC LAVATORY FAUCET, TYP.		22.14	HAND SHOWER SET WITH SLIDE BAR			
5.14	HANDRAIL	22.15	URINAL ELECTRONIC FLUSH VALVE		DIVISION 23 - HVAC				
5.15	METAL FRAMED STAIR	23.1	BOILER FLUE		23.2	DUCT			
5.16	TEEL CHANNEL	23.3	PERIMETER HYDRONIC HEATER		23.4	FIRE DAMPER			
5.17	VISUALLY CONTRASTING STAINLESS STEEL STRIP, SEE SHEET 1/A002 FOR ACCESSIBILITY REQUIREMENTS	23.5	RADIANT CEILING PANEL		23.6	MECHANICAL SHAFT OPENING			
DIVISION 06 - WOOD, PLASTIC & COMPOSITES					23.7	RADIANT FLOOR SLAB SYSTEM			
6.1	WOOD BLOCK/NAILER, PRESSURE TREATED	DIVISION 07 - THERMAL & MOISTURE PROTECTION							
6.2	3/4" PLYWOOD, FIRE RETARDANT TREATED	7.1	STAINLESS STEEL FLASHING/COUNTERFLASHING		7.2	THERMOPLASTIC MEMBRANE ROOFING			
6.3	5/8" GLASS MAT FACED GYP SHEATHING	7.3	MEMBRANE EDGE FASTENER @ 12" O/C		7.4	SAND COATED ROOF WALKWAY			
6.4	PLASTIC LAMINATE	7.5	RIGID ROOF INSULATION OF AGED R=30 (UON)		7.6	BATT INSULATION R=19			
6.5	SOLID-SURFACING MATERIAL COUNTERTOP	7.7	PVC MEMBRANE FLASHING		7.8	EXTRUDED ALUM TRIM			
6.6	RECYCLED WOOD TREAD	7.9	ALUM FLASHING		7.10	FORMED SHEET SS COPING			
DIVISION 08 - OPENINGS					7.11	BELOW GRADE DAMP/WATERPROOFING			
8.1	DOOR & FRAME	7.12	SEALANT WITH BACKER ROD		7.13	20 GA GALVANIZED SPLASH PAN			
8.2	MOTORIZED OPERABLE WINDOW	7.14	DOWN SPOUT		7.15	WATERPROOFING MEMBRANE			
8.3	MANUAL OPERABLE WINDOW	7.16	INSULATED METAL PANEL CLADDING		7.17	ROOF SEISMIC JOINT COVER			
8.4	AUTOMATIC DOOR BOTTOM	7.18	EXTERIOR WALL SEISMIC JOINT COVER		7.19	INTERIOR WALL SEISMIC JOINT COVER			
8.5	THRESHOLD	7.20	CEILING SEISMIC JOINT COVER		7.21	FIRESTOPPING			
8.6	GLAZED ALUM CURTAIN WALL SYSTEM	7.22	SAND COATED ROOF WALKWAY		7.23	METAL SPANDREL PANEL (INSULATED)			
8.7	1" INSULATED GLAZING	7.24	THERMOPLASTIC MEMBRANE PARAPET FLASHING		7.25	THERMOPLASTIC MEMBRANE COVER STRIP, HOT-AIR WELDED			
8.8	FRITTED GLAZING	7.26	EXTRUDED ALUM BAR W/ FASTENERS @ 12" O.C. MAX		7.27	FLOOR SEISMIC JOINT COVER			
8.9	SPANDREL GLAZING	7.28	S.S. PERFORATED RIBBED METAL (20 GA)		7.29	METAL PANEL SOFFIT			
8.10	VISION GLASS (SAFETY WHERE REQUIRED)	DIVISION 09 - FINISHES							
8.11	RECYCLED GLAZING	9.1	1/2" GWB TYPE X		9.2	5/8" GWB TYPE X			
8.12	AUTOMATIC ENTRANCE DOOR	9.3	1" GWB SHAFT LINER		9.4	20 GA MTL STUD @ 16" O/C			
8.13	SKYLIGHT	9.5	SLOTTED TOP TRACK		9.6	METAL STUD TRACK			
8.14	WEATHERSTRIPPING	9.7	COLD FORMED FURRING CHANNEL		9.8	SHAFT WALL STUD MIN 20 GA @ 24" O/C			
8.15	MTL SECURITY GATE	9.9	FRAMING ANGLE, MIN 20 GA GALV		9.10	FURRING CHANNEL MIN 20 GA, SIZE AS NOTED			
8.16	DOOR PULL	9.11	SHAFT J RUNNER		9.12	CERAMIC TILE			
DIVISION 09 - FINISHES					9.13	REINFORCED MORTAR SETTING BED			
9.1	1/2" GWB TYPE X	9.14	SCHEDULED FLOORING		9.15	SUSPENDED GYP BOARD CEILING SYSTEM			
9.2	5/8" GWB TYPE X	9.16	SCHEDULED WALL BASE		9.17	PAINT			
9.3	1" GWB SHAFT LINER	9.18	5/8" CEMENTITIOUS TILE BACKER BOARD		9.19	5/8" GLASS MAT FACED TILE BACKER BOARD			
9.4	20 GA MTL STUD @ 16" O/C	9.20	NOT USED		9.21	SOUND ATTENUATION BLANKET			
9.5	SLOTTED TOP TRACK	9.22	ACOUSTICAL INSULATION 3" (UON)		9.23	SUSPENDED ACOUSTICAL CEILING			
9.6	METAL STUD TRACK	PROJECT STATUS							
9.7	COLD FORMED FURRING CHANNEL	PRELIMINARY - NOT FOR CONSTRUCTION							
9.8	SHAFT WALL STUD MIN 20 GA @ 24" O/C	ISSUE							
9.9	FRAMING ANGLE, MIN 20 GA GALV	1	10/20/2008	30% PRICING					
9.10	FURRING CHANNEL MIN 20 GA, SIZE AS NOTED	2	11/07/2008	30% DESIGN REVISION					
9.11	SHAFT J RUNNER	3	12/12/2008	60% INTERNAL QA/QC & COST ESTIMATE					
9.12	CERAMIC TILE	4	12/19/2008	60% PRE-FINAL, NASA REVIEW					
9.13	REINFORCED MORTAR SETTING BED	5	01/19/2009	60% FINAL ISSUE TO NASA					
9.14	SCHEDULED FLOORING	6	02/16/2009	90% QAQC & COST ESTIMATE					
9.15	SUSPENDED GYP BOARD CEILING SYSTEM	MARK	DATE	DESCRIPTION					
9.16	SCHEDULED WALL BASE	DRAWN	G JOHNSON	DATE					
9.17	PAINT	DESIGNED	WM+P	DATE					
9.18	5/8" CEMENTITIOUS TILE BACKER BOARD	CHECKED	R PRADHAN	DATE					
9.19	5/8" GLASS MAT FACED TILE BACKER BOARD	PROJMG		DATE					
9.20	NOT USED	REQUESTOR		DATE					
9.21	SOUND ATTENUATION BLANKET	R&QA		DATE					
9.22	ACOUSTICAL INSULATION 3" (UON)	SAFETY		DATE					
9.23	SUSPENDED ACOUSTICAL CEILING	SUPERVISOR		DATE					
					SIZE	CASE CODE	A232-0800-	A711	REV
					D	25307			
					SCALE	INDEX	SHEET	OF	

MATERIAL KEYNOTES

- | | | | |
|--|--|----------------------------------|--|
| DIVISION 03 - CONCRETE | | DIVISION 10 - SPECIALTIES | |
| 3.1 | CAST IN PLACE CONCRETE | 10.1 | TOILET PARTITION |
| 3.2 | 6" CONC. HOUSEKEEPING PAD | 10.2 | FIXED SUNSCREEN (BIPV @ BID ALTERNATE) |
| 3.3 | VAPOR BARRIER | 10.3 | METAL LOCKER |
| 3.4 | GRANULAR FILL | 10.4 | FIRE EXTINGUISHER CABINET |
| 3.5 | CANE DETECTION AREA | 10.5 | DOOR STOP |
| DIVISION 05 - METALS | | 10.6 | ALUM LIGHT SHELF (BID ALTERNATE) |
| 5.1 | STEEL BEAM | 10.7 | VINE CABLE SYSTEM |
| 5.2 | STEEL COLUMN | 10.8 | EXTRUDED ALUM LOUVER AIRFOIL |
| 5.3 | METAL DECK | 10.9 | NOT USED |
| 5.4 | STEEL ANGLE | 10.10 | ACCESS FLOORING- 10" HIGH |
| 5.5 | STEEL PLATE | DIVISION 11 - EQUIPMENT | |
| 5.6 | TUBULAR STEEL | 11.1 | MOTORIZED PROJECTION SCREEN |
| 5.7 | STEEL BENT PLATE | 11.2 | PROJECTOR |
| 5.8 | STAINLESS STEEL FRAME | DIVISION 12 - FURNISHINGS | |
| 5.9 | OPEN WEB STEEL JOIST | 12.1 | MOTORIZED WINDOW SHADE |
| 5.10 | NOT USED | 12.2 | SYSTEM FURNITURE, NIC |
| 5.11 | EXT. COLD FORMED METAL FRAMING, SEE STRUCT. | 12.3 | ENTRANCE FLOOR MAT & FRAME |
| 5.12 | NOT USED | DIVISION 14 - EQUIPMENT | |
| 5.13 | GUARDRAIL | 14.1 | HYDRAULIC HOLELESS ELEVATOR, 3500 LB |
| 5.14 | HANDRAIL | DIVISION 22 - PLUMBING | |
| 5.15 | METAL FRAMED STAIR | 22.1 | ROOF DRAIN |
| 5.16 | TEEL CHANNEL | 22.2 | OVERFLOW SCUPPER |
| 5.17 | VISUALLY CONTRASTING STAINLESS STEEL STRIP, SEE SHEET 1A002 FOR ACCESSIBILITY REQUIREMENTS | 22.3 | VENT THROUGH ROOF |
| DIVISION 06 - WOOD, PLASTIC & COMPOSITES | | 22.4 | ELECTRIC WATER COOLER |
| 6.1 | WOOD BLOCK/NAILER, PRESSURE TREATED | 22.5 | KITCHEN SINK |
| 6.2 | 3/4" PLYWOOD, FIRE RETARDANT TREATED | 22.6 | SERVICE SINK |
| 6.3 | 5/8" GLASS MAT FACED GYP SHEATHING | 22.7 | FLOOR DRAIN |
| 6.4 | PLASTIC LAMINATE | 22.8 | FILTERED WATER SYSTEM FAUCET |
| 6.5 | SOLID-SURFACING MATERIAL COUNTERTOP | 22.9 | DUAL FLUSH TOILET @ WOMEN'S |
| 6.6 | RECYCLED WOOD TRAP | 22.10 | HIGH EFFICIENCY TOILET @ MEN'S |
| DIVISION 07 - THERMAL & MOISTURE PROTECTION | | 22.11 | LOW CONSUMPTION URINAL |
| 7.1 | STAINLESS STEEL FLASHING/COUNTERFLASHING | 22.12 | COUNTERTOP SINK |
| 7.2 | THERMOPLASTIC MEMBRANE ROOFING | 22.13 | ELECTRONIC LAVATORY FAUCET, TYP. |
| 7.3 | STAINLESS EDGE FASTENER @ 12" O/C | 22.14 | HAND SHOWER SET WITH SLIDE BAR |
| 7.4 | SAND COATED ROOF WALKWAY | 22.15 | URINAL ELECTRONIC FLUSH VALVE |
| 7.5 | RIGID ROOF INSULATION OF AGED R=30 (UON) | DIVISION 23 - HVAC | |
| 7.6 | BATT INSULATION R=19 | 23.1 | BOILER FLUE |
| 7.7 | PVC MEMBRANE FLASHING | 23.2 | DUCT |
| 7.8 | EXTRUDED ALUM TRIM | 23.3 | PERIMETER HYDRONIC HEATER |
| 7.9 | ALUM FLASHING | 23.4 | FIRE DAMPER |
| 7.10 | FORMED SHEET SS COPING | 23.5 | RADIANT CEILING PANEL |
| 7.11 | BELOW GRADE DAMP/WATERPROOFING | 23.6 | MECHANICAL SHAFT OPENING |
| 7.12 | SEALANT WITH BACKER ROD | 23.7 | RADIANT FLOOR SLAB SYSTEM |
| 7.13 | 20 GA GALVANIZED SPLASH PAN | DIVISION 08 - OPENINGS | |
| 7.14 | DOWN SPOUT | 8.1 | DOOR & FRAME |
| 7.15 | WATERPROOFING MEMBRANE | 8.2 | MOTORIZED OPERABLE WINDOW |
| 7.16 | INSULATED METAL PANEL CLADDING | 8.3 | MANUAL OPERABLE WINDOW |
| 7.17 | ROOF SEISMIC JOINT COVER | 8.4 | AUTOMATIC DOOR BOTTOM |
| 7.18 | EXTERIOR WALL SEISMIC JOINT COVER | 8.5 | THRESHOLD |
| 7.19 | INTERIOR WALL SEISMIC JOINT COVER | 8.6 | GLAZED ALUM CURTAIN WALL SYSTEM |
| 7.20 | CEILING SEISMIC JOINT COVER | 8.7 | 1" INSULATED GLAZING |
| 7.21 | FIRESTOPPING | 8.8 | FRITTED GLAZING |
| 7.22 | SAND COATED ROOF WALKWAY | 8.9 | SPANDREL GLAZING |
| 7.23 | METAL SPANDREL PANEL (INSULATED) | 8.10 | VISION GLASS (SAFETY WHERE REQUIRED) |
| 7.24 | THERMOPLASTIC MEMBRANE PARAPET FLASHING | 8.11 | RECYCLED GLAZING |
| 7.25 | THERMOPLASTIC MEMBRANE COVER STRIP, HOT-AIR WELDED | 8.12 | AUTOMATIC ENTRANCE DOOR |
| 7.26 | EXTRUDED ALUM BAR W/ FASTENERS @ 12" O.C. MAX | 8.13 | SKYLIGHT |
| 7.27 | FLOOR SEISMIC JOINT COVER | 8.14 | WEATHERSTRIPPING |
| 7.28 | S.S. PERFORATED RIBBED METAL (20 GA) | 8.15 | MTL SECURITY GATE |
| 7.29 | METAL PANEL SOFFIT | 8.16 | DOOR PULL |
| DIVISION 09 - FINISHES | | DIVISION 09 - FINISHES | |
| 9.1 | 1/2" GWB TYPE X | 9.1 | 1/2" GWB TYPE X |
| 9.2 | 5/8" GWB TYPE X | 9.2 | 5/8" GWB TYPE X |
| 9.3 | 1" GWB SHAFT LINER | 9.3 | 1" GWB SHAFT LINER |
| 9.4 | 20 GA MTL STUD @ 16" O/C | 9.4 | 20 GA MTL STUD @ 16" O/C |
| 9.5 | SLOTTED TOP TRACK | 9.5 | SLOTTED TOP TRACK |
| 9.6 | METAL STUD TRACK | 9.6 | METAL STUD TRACK |
| 9.7 | COLD FORMED FURRING CHANNEL | 9.7 | COLD FORMED FURRING CHANNEL |
| 9.8 | SHAFT WALL STUD MIN 20 GA @ 24" O/C | 9.8 | SHAFT WALL STUD MIN 20 GA @ 24" O/C |
| 9.9 | FRAMING ANGLE, MIN 20 GA GALV | 9.9 | FRAMING ANGLE, MIN 20 GA GALV |
| 9.10 | FURRING CHANNEL MIN 20 GA, SIZE AS NOTED | 9.10 | FURRING CHANNEL MIN 20 GA, SIZE AS NOTED |
| 9.11 | SHAFT J RUNNER | 9.11 | SHAFT J RUNNER |
| 9.12 | CERAMIC TILE | 9.12 | CERAMIC TILE |
| 9.13 | REINFORCED MORTAR SETTING BED | 9.13 | REINFORCED MORTAR SETTING BED |
| 9.14 | SCHEDULED FLOORING | 9.14 | SCHEDULED FLOORING |
| 9.15 | SUSPENDED GYP BOARD CEILING SYSTEM | 9.15 | SUSPENDED GYP BOARD CEILING SYSTEM |
| 9.16 | SCHEDULED WALL BASE | 9.16 | SCHEDULED WALL BASE |
| 9.17 | PAINT | 9.17 | PAINT |
| 9.18 | 5/8" CEMENTITIOUS TILE BACKER BOARD | 9.18 | 5/8" CEMENTITIOUS TILE BACKER BOARD |

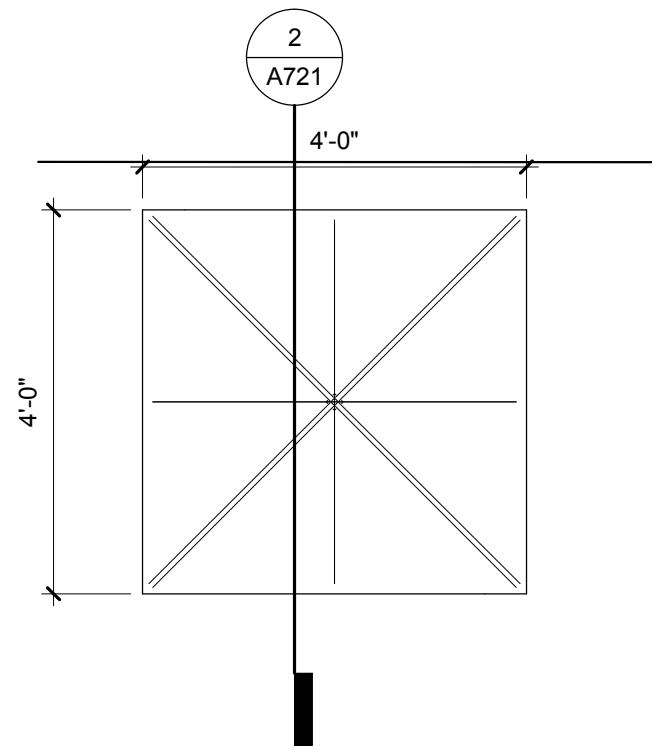


3 SKYLIGHT CURB DETAIL

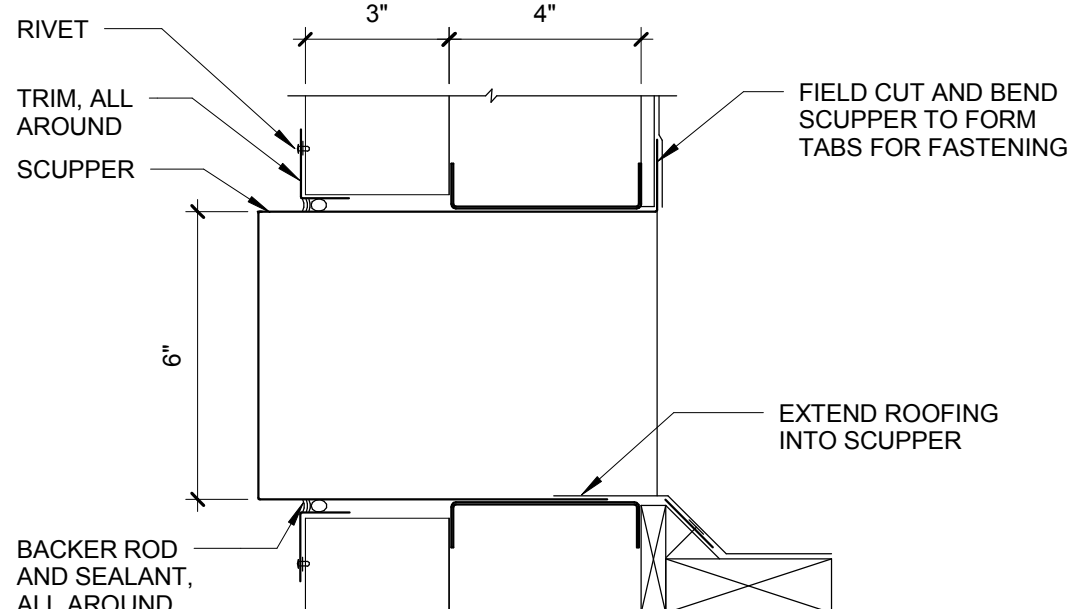


2 | SKYLIGHT SECTION

A721 REF: A311 SCALE: 1/2" = 1'-0"

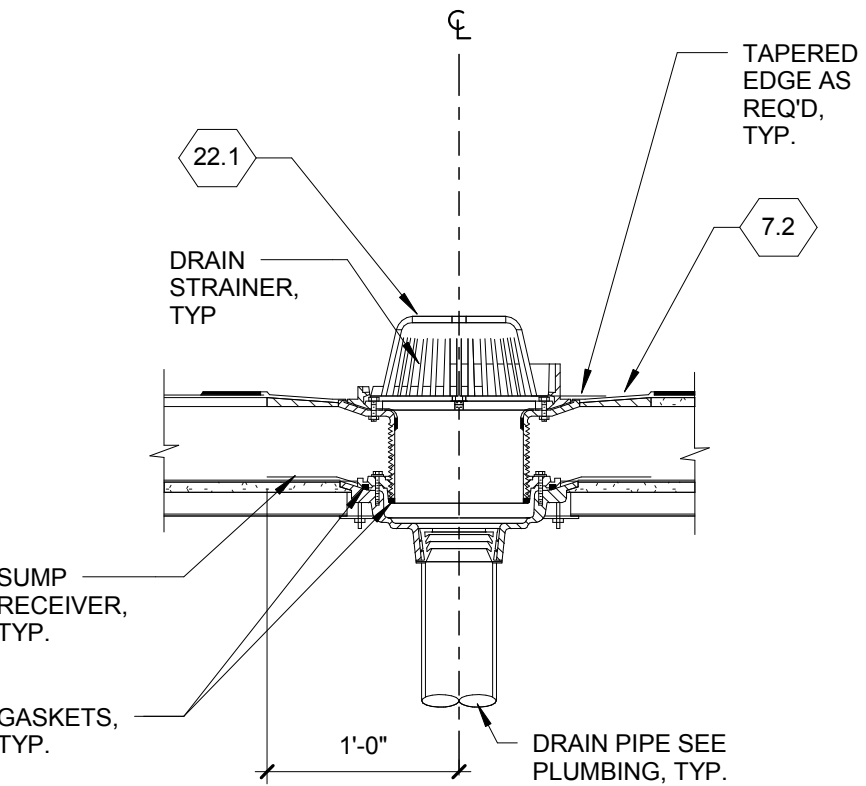


1 | ENLARGED SKYLIGHT PLAN

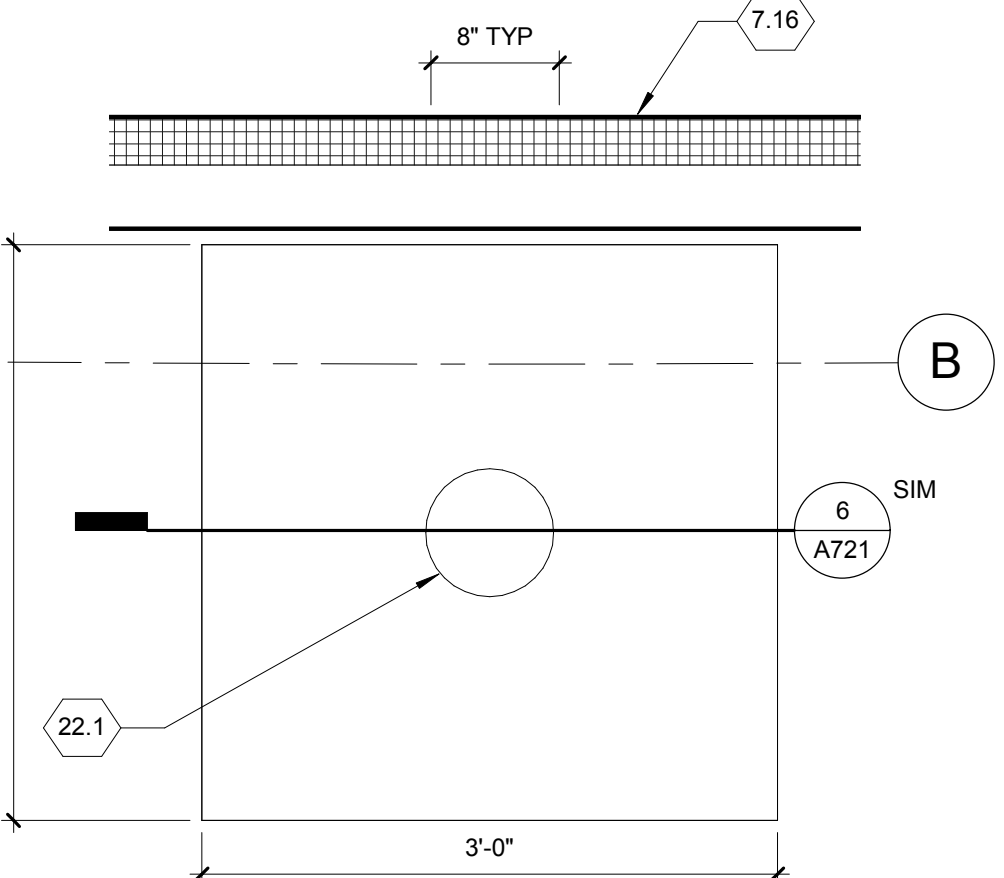


7 | SCUPPER SECTION

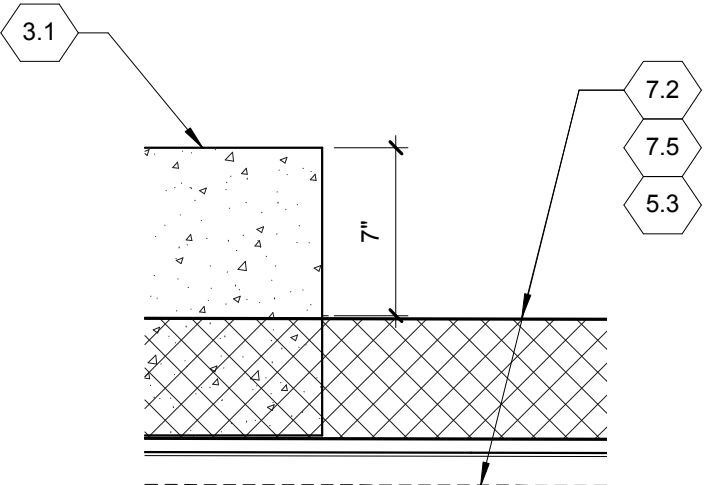
A721 REF: SCALE: 3" = 1'-0"



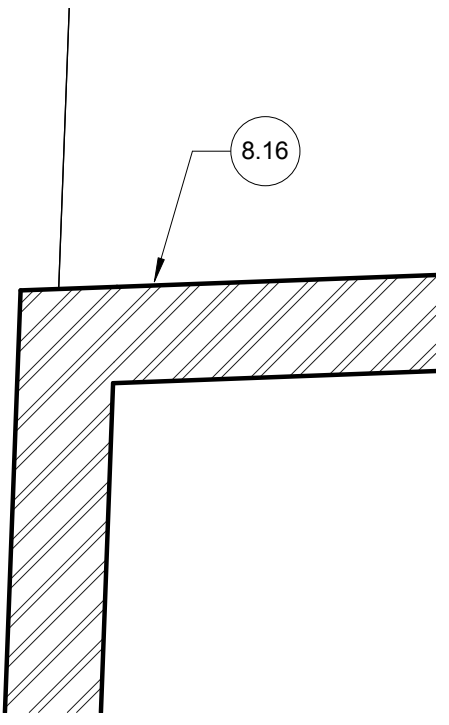
6 ROOF DRAIN/OVERFLOW SECTION DETAIL



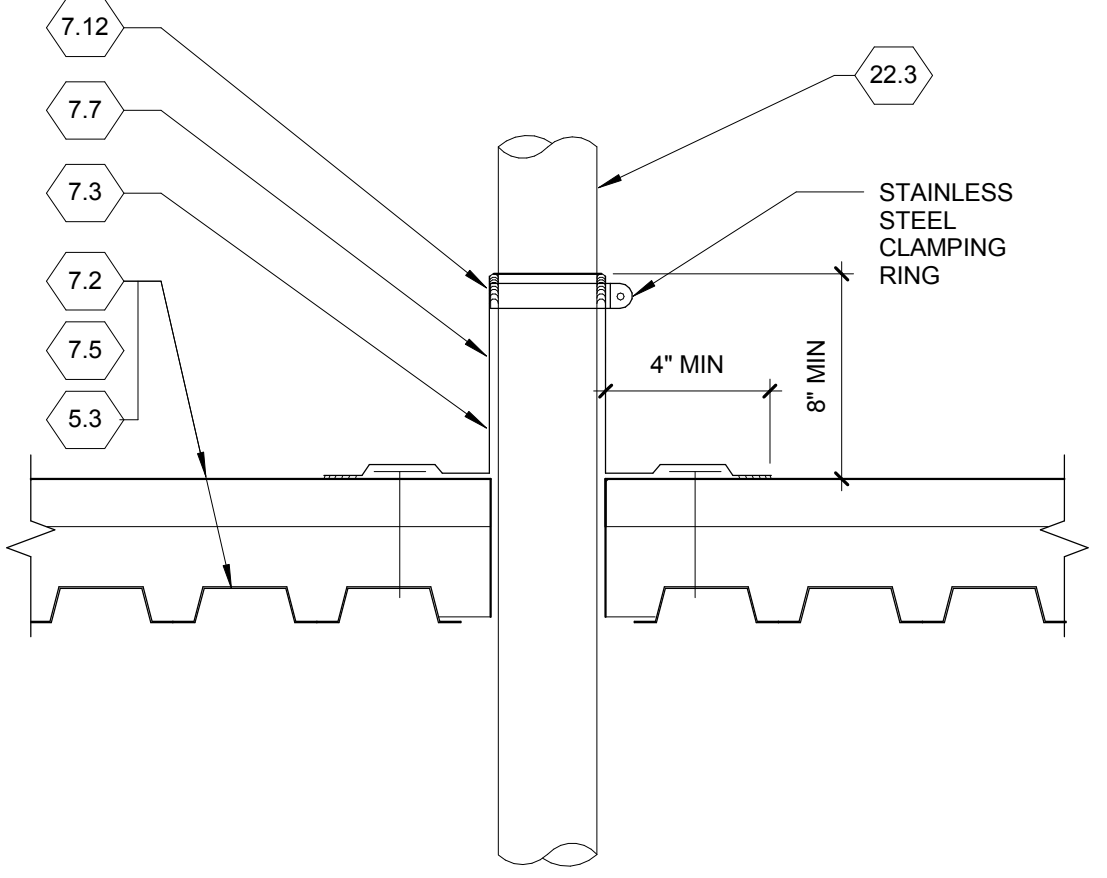
5 ROOF DRAIN/OVERFLOW PLAN DETAIL



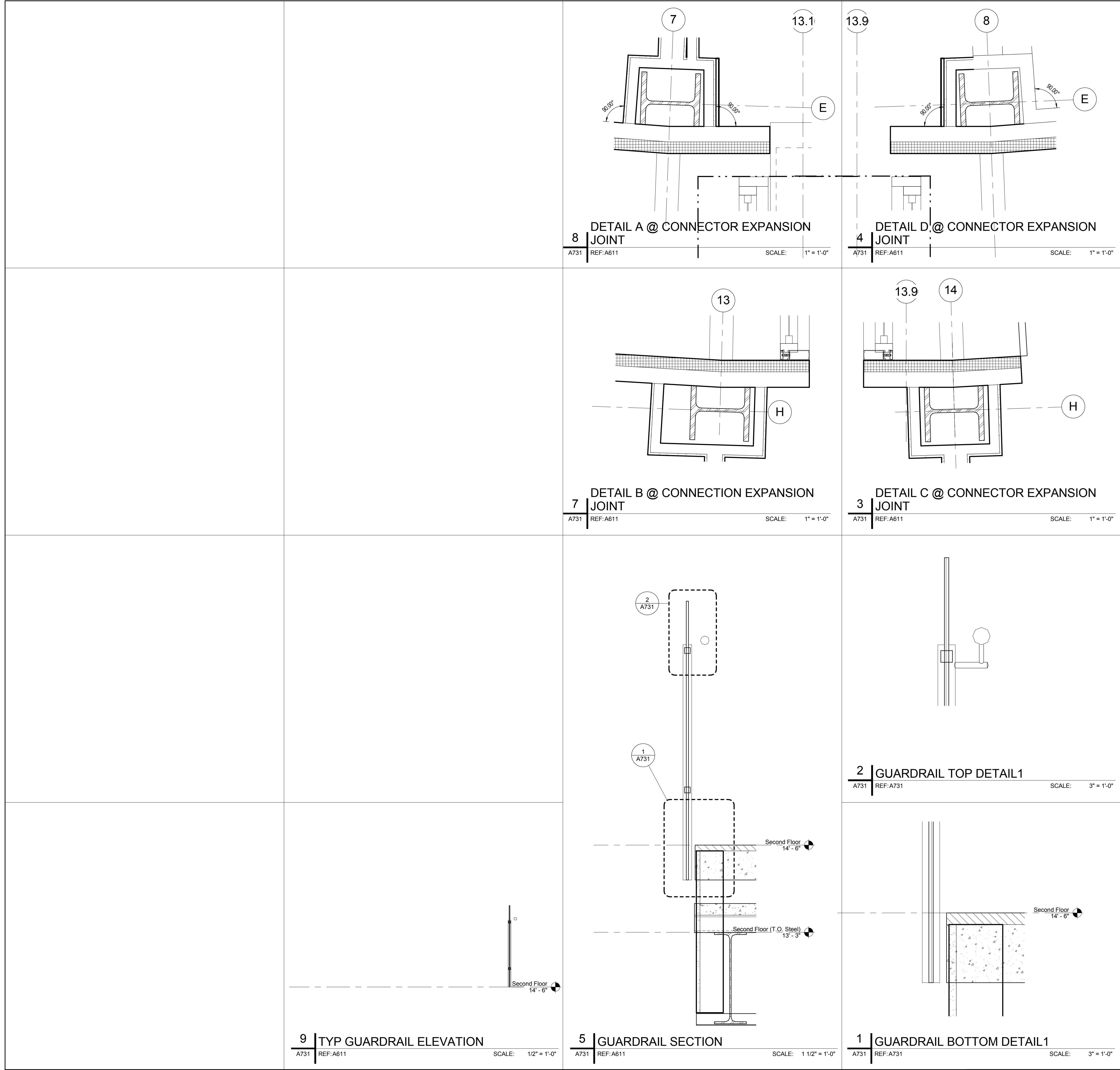
11 ROOF MECHANICAL CONC PAD DETAIL



10 PENTHOUSE CORNER WALL PLAN DETAIL




9 | PIPE PENETRATION FLASHING
 A721 REF: A503 SCALE: 1 1/2" = 1'-0"



MATERIAL KEYNOTES

<div>DIVISION 03 - CONCRETE</div> <div>3.1 CAST IN PLACE CONCRETE</div> <div>3.2 6" CONC HOUSEKEEPING PAD</div> <div>3.3 VAPOR BARRIER</div> <div>3.4 GRANULAR FILL</div> <div>3.5 CANE DETECTION AREA</div> <div>DIVISION 05 - METALS</div> <div>5.1 STEEL BEAM</div> <div>5.2 STEEL COLUMN</div> <div>5.3 METAL DECK</div> <div>5.4 STEEL ANGLE</div> <div>5.5 STEEL PLATE</div> <div>5.6 TUBULAR STEEL</div> <div>5.7 STEEL BENT PLATE</div> <div>5.8 STAINLESS STEEL FRAME</div> <div>5.9 OPEN WEB STEEL JOIST</div> <div>5.10 NOT USED</div> <div>5.11 EXT. COLD FORMED METAL FRAMING, SEE STRUCT.</div> <div>5.12 NOT USED</div> <div>5.13 GUARDRAIL</div> <div>5.14 HANDRAIL</div> <div>5.15 METAL FRAMED STAIR</div> <div>5.16 TEEL CHANNEL</div> <div>5.17 VISUALLY CONTRASTING STAINLESS STEEL STRIP, SEE SHEET 1/A002 FOR ACCESSIBILITY REQUIREMENTS</div> <div>DIVISION 06 - WOOD, PLASTIC & COMPOSITES</div> <div>6.1 WOOD BLOCK/NAILER, PRESSURE TREATED</div> <div>6.2 3/4" PLYWOOD, FIRE RETARDANT TREATED</div> <div>6.3 5/8" GLASS MAT FACED GYP SHEATHING</div> <div>6.4 PLASTIC LAMINATE</div> <div>6.5 SOLID-SURFACING MATERIAL COUNTERTOP</div> <div>6.6 RECYCLED WOOD TREAD</div> <div>DIVISION 07 - THERMAL & MOISTURE PROTECTION</div> <div>7.1 STAINLESS STEEL FLASHING/COUNTERFLASHING</div> <div>7.2 THERMOPLASTIC MEMBRANE ROOFING</div> <div>7.3 MEMBRANE EDGE FASTENER @ 12" O/C</div> <div>7.4 SAND COATED ROOF WALKWAY</div> <div>7.5 RIGID ROOF INSULATION OF AGED R=30 (UON)</div> <div>7.6 BATT INSULATION R=19</div> <div>7.7 PVC MEMBRANE FLASHING</div> <div>7.8 EXTRUDED ALUM TRIM</div> <div>7.9 ALUM FLASHING</div> <div>7.10 FORMED SHEET SS COPING</div> <div>7.11 BELOW GRADE DAMP/WATERPROOFING</div> <div>7.12 SEALANT WITH BACKER ROD</div> <div>7.13 20 GA GALVANIZED SPLASH PAN</div> <div>7.14 DOWN SPOUT</div> <div>7.15 WATERPROOFING MEMBRANE</div> <div>7.16 INSULATED METAL PANEL CLADDING</div> <div>7.17 ROOF SEISMIC JOINT COVER</div> <div>7.18 EXTERIOR WALL SEISMIC JOINT COVER</div> <div>7.19 INTERIOR WALL SEISMIC JOINT COVER</div> <div>7.20 CEILING SEISMIC JOINT COVER</div> <div>7.21 FIRES TOPPING</div> <div>7.22 SAND COATED ROOF WALKWAY</div> <div>7.23 METAL SPANDREL PANEL (INSULATED)</div> <div>7.24 THERMOPLASTIC MEMBRANE PARAPET FLASHING</div> <div>7.25 THERMOPLASTIC MEMBRANE COVER STRIP, HOT-AIR WELDED</div> <div>7.26 EXTRUDED ALUM BAR W/ FASTENERS @ 12" O.C. MAX</div> <div>7.27 FLOOR SEISMIC JOINT COVER</div> <div>7.28 S.S. PERFORATED RIBBED METAL (20 GA)</div> <div>7.29 METAL PANEL SOFFIT</div> <div>DIVISION 08 - OPENINGS</div> <div>8.1 DOOR & FRAME</div> <div>8.2 MOTORIZED OPERABLE WINDOW</div> <div>8.3 MANUAL OPERABLE WINDOW</div> <div>8.4 AUTOMATIC DOOR BOTTOM</div> <div>8.5 THRESHOLD</div> <div>8.6 GLAZED ALUM CURTAIN WALL SYSTEM</div> <div>8.7 1" INSULATED GLAZING</div> <div>8.8 FRITTED GLAZING</div> <div>8.9 SPANDREL GLAZING</div> <div>8.10 VISION GLASS (SAFETY WHERE REQUIRED)</div> <div>8.11 RECYCLED GLAZING</div> <div>8.12 AUTOMATIC ENTRANCE DOOR</div> <div>8.13 SKYLIGHT</div> <div>8.14 WEATHERSTRIPPING</div> <div>8.15 MTL SECURITY GATE</div> <div>8.16 DOOR PULL</div> <div>DIVISION 09 - FINISHES</div> <div>9.1 1/2" GWB TYPE X</div> <div>9.2 5/8" GWB TYPE X</div> <div>9.3 1" GWB SHAFT LINER</div> <div>9.4 20 GA MTL STUD @ 16" O/C</div> <div>9.5 SLOTTED TOP TRACK</div> <div>9.6 METAL STUD TRACK</div> <div>9.7 COLD FORMED FURRING CHANNEL</div> <div>9.8 SHAFT WALL STUD MIN 20 GA @ 24" O/C</div> <div>9.9 FRAMING ANGLE, MIN 20 GA GALV</div> <div>9.10 FURRING CHANNEL MIN 20 GA, SIZE AS NOTED</div> <div>9.11 SHAFT J RUNNER</div> <div>9.12 CERAMIC TILE</div> <div>9.13 REINFORCED MORTAR SETTING BED</div> <div>9.14 SCHEDULED FLOORING</div> <div>9.15 SUSPENDED GYP BOARD CEILING SYSTEM</div> <div>9.16 SCHEDULED WALL BASE</div> <div>9.17 PAINT</div> <div>9.18 5/8" CEMENTITIOUS TILE BACKER BOARD</div> <div>9.19 5/8" GLASS MAT FACED TILE BACKER BOARD</div> <div>9.20 NOT USED</div> <div>9.21 SOUND ATTENUATION BLANKET</div> <div>9.22 ACOUSTICAL INSULATION 3" (UON)</div> <div>9.23 SUSPENDED ACOUSTICAL CEILING</div>	<div>DIVISION 10 - SPECIALTIES</div> <div>10.1 TOILET PARTITION</div> <div>10.2 FIXED SUNSCREEN (BIPV @ BID ALTERNATE)</div> <div>10.3 METAL LOCKER</div> <div>10.4 FIRE EXTINGUISHER CABINET</div> <div>10.5 DOOR STOP</div> <div>10.6 ALUM LIGHT SHELF (BID ALTERNATE)</div> <div>10.7 VINE CABLE SYSTEM</div> <div>10.8 EXTRUDED ALUM LOUVER AIRFOIL</div> <div>10.9 NOT USED</div> <div>10.10 ACCESS FLOORING- 10" HIGH</div> <div>DIVISION 11 - EQUIPMENT</div> <div>11.1 MOTORIZED PROJECTION SCREEN</div> <div>11.2 PROJECTOR</div> <div>DIVISION 12 - FURNISHINGS</div> <div>12.1 MOTORIZED WINDOW SHADE</div> <div>12.2 SYSTEM FURNITURE, NIC</div> <div>12.3 ENTRANCE FLOOR MAT & FRAME</div> <div>DIVISION 14 - EQUIPMENT</div> <div>14.1 HYDRAULIC HOLELESS ELEVATOR, 3500 LB</div> <div>DIVISION 22 - PLUMBING</div> <div>22.1 ROOF DRAIN</div> <div>22.2 OVERFLOW SCUPPER</div> <div>22.3 VENT THROUGH ROOF</div> <div>22.4 ELECTRIC WATER COOLER</div> <div>22.5 KITCHEN SINK</div> <div>22.6 SERVICE SINK</div> <div>22.7 FLOOR DRAIN</div> <div>22.8 FILTERED WATER SYSTEM FAUCET</div> <div>22.9 DUAL FLUSH TOILET @ WOMEN'S</div> <div>22.10 HIGH EFFICIENCY TOILET @ MEN'S</div> <div>22.11 LOW CONSUMPTION URINAL</div> <div>22.12 COUNTERTOP SINK</div> <div>22.13 ELECTRONIC LAVATORY FAUCET, TYP.</div> <div>22.14 HAND SHOWER SET WITH SLIDE BAR</div> <div>22.15 URINAL ELECTRONIC FLUSH VALVE</div> <div>DIVISION 23 - HVAC</div> <div>23.1 BOILER FLUE</div> <div>23.2 DUCT</div> <div>23.3 PERIMETER HYDRONIC HEATER</div> <div>23.4 FIRE DAMPER</div> <div>23.5 RADIANT CEILING PANEL</div> <div>23.6 MECHANICAL SHAFT OPENING</div> <div>23.7 RADIANT FLOOR SLAB SYSTEM</div>
--	--

PROJECT STATUS		
PRELIMINARY - NOT FOR CONSTRUCTION		
ISSUE	DATE	DESCRIPTION
1	10/20/2008	30% PRICING
2	11/07/2008	30% DESIGN REVISION
3	12/12/2008	60% INTERNAL QA/QC & COST ESTIMATE
4	12/19/2008	60% PRE-FINAL, NASA REVIEW
5	01/19/2009	60% FINAL ISSUE TO NASA
6	02/16/2009	90% QA/QC & COST ESTIMATE
MARK	DATE	DESCRIPTION
DRAWN	G JOHNSON	
DESIGNED	WM+P	
CHECKED	R PRADHAN	
PROJMG		
REQUESTOR		
R&GA		
SAFETY		
SUPERVISOR		
SIZE	CAUSE CODE	
D	25307	A232-0800-
SCALE	INDEX	SHEET
		OF

**Ames Research Center**
Moffet Field, California

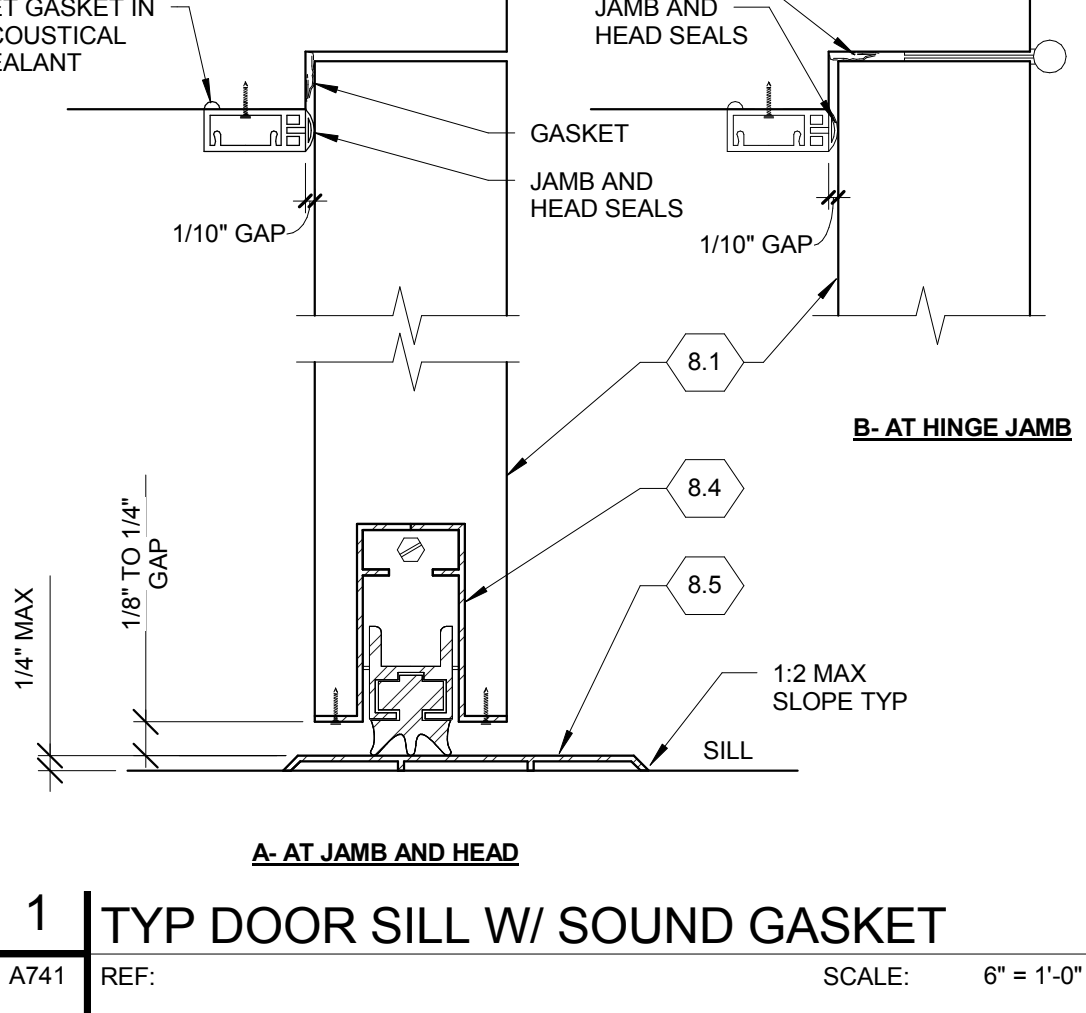
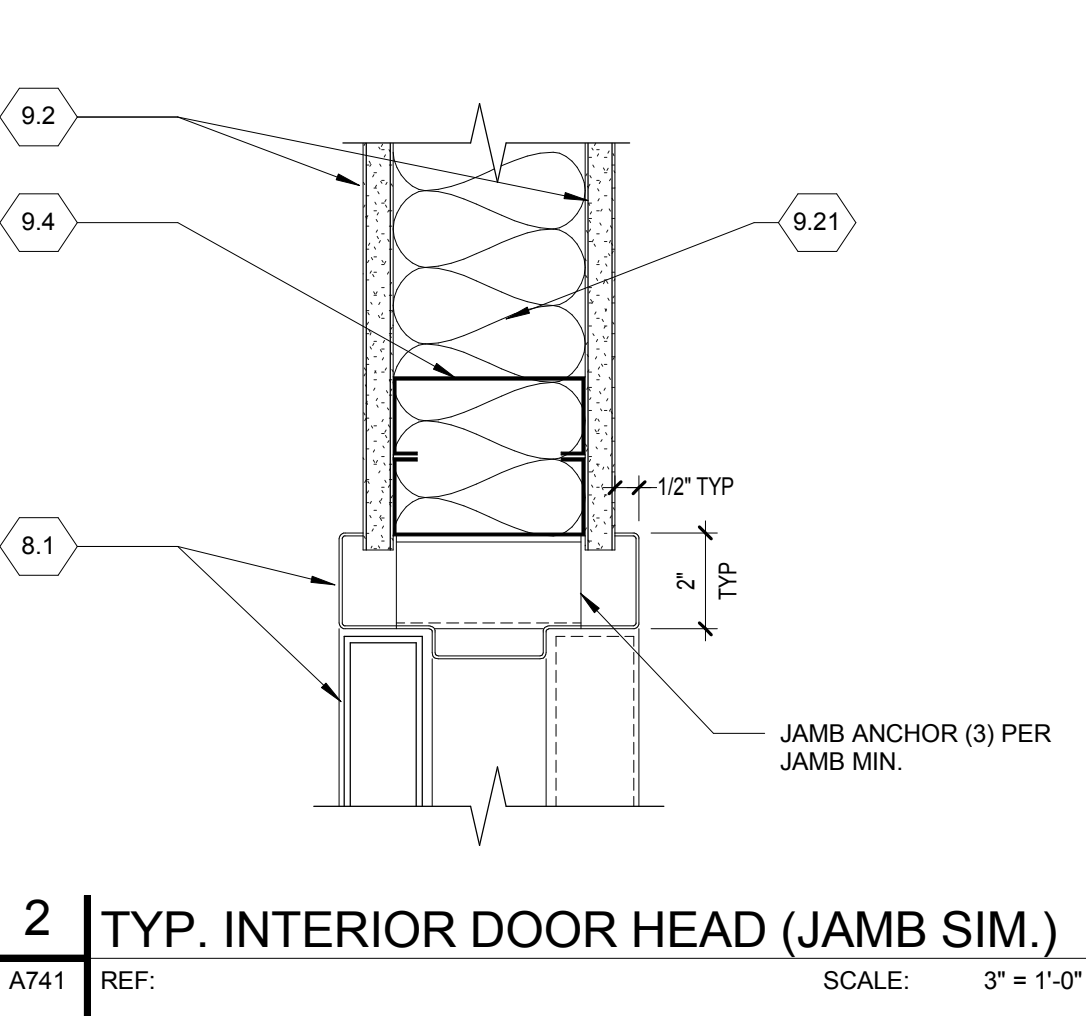
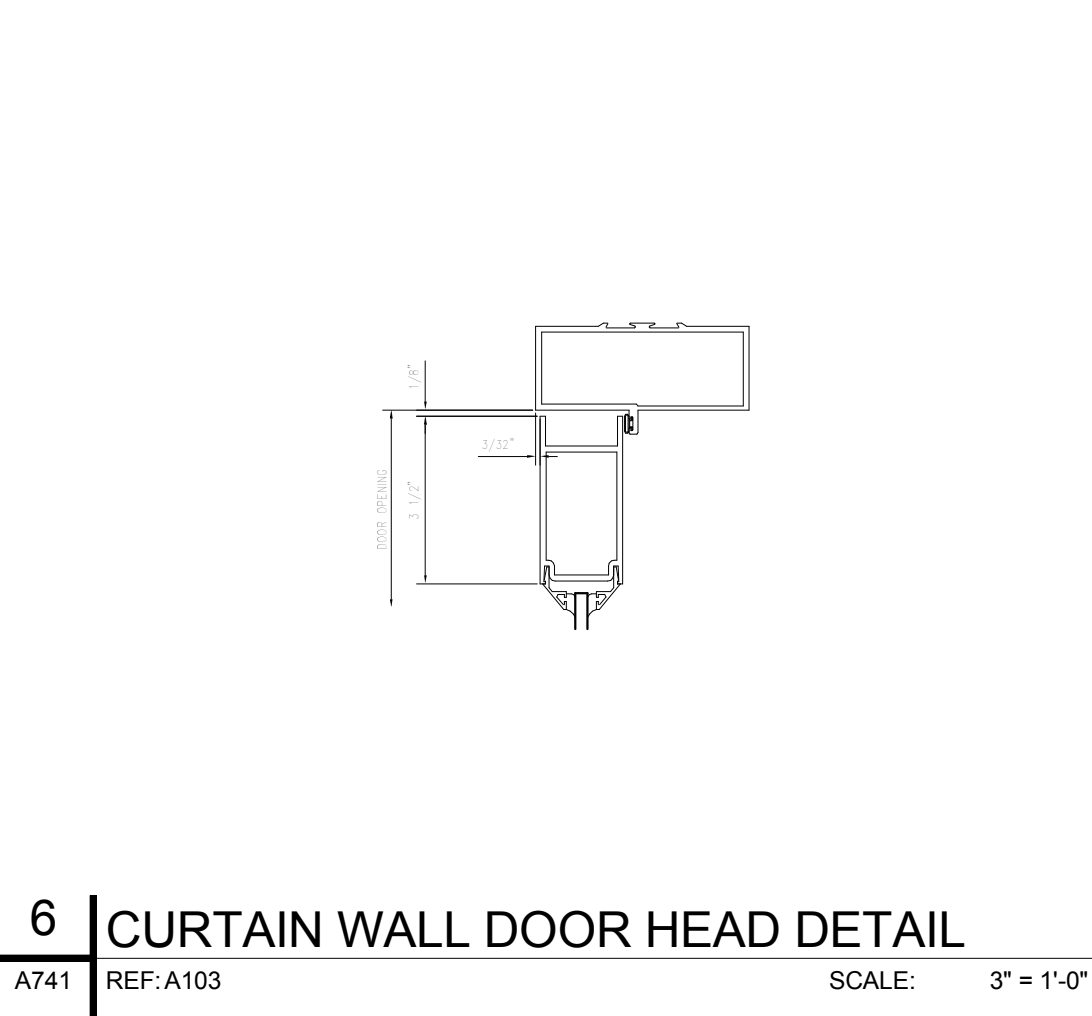
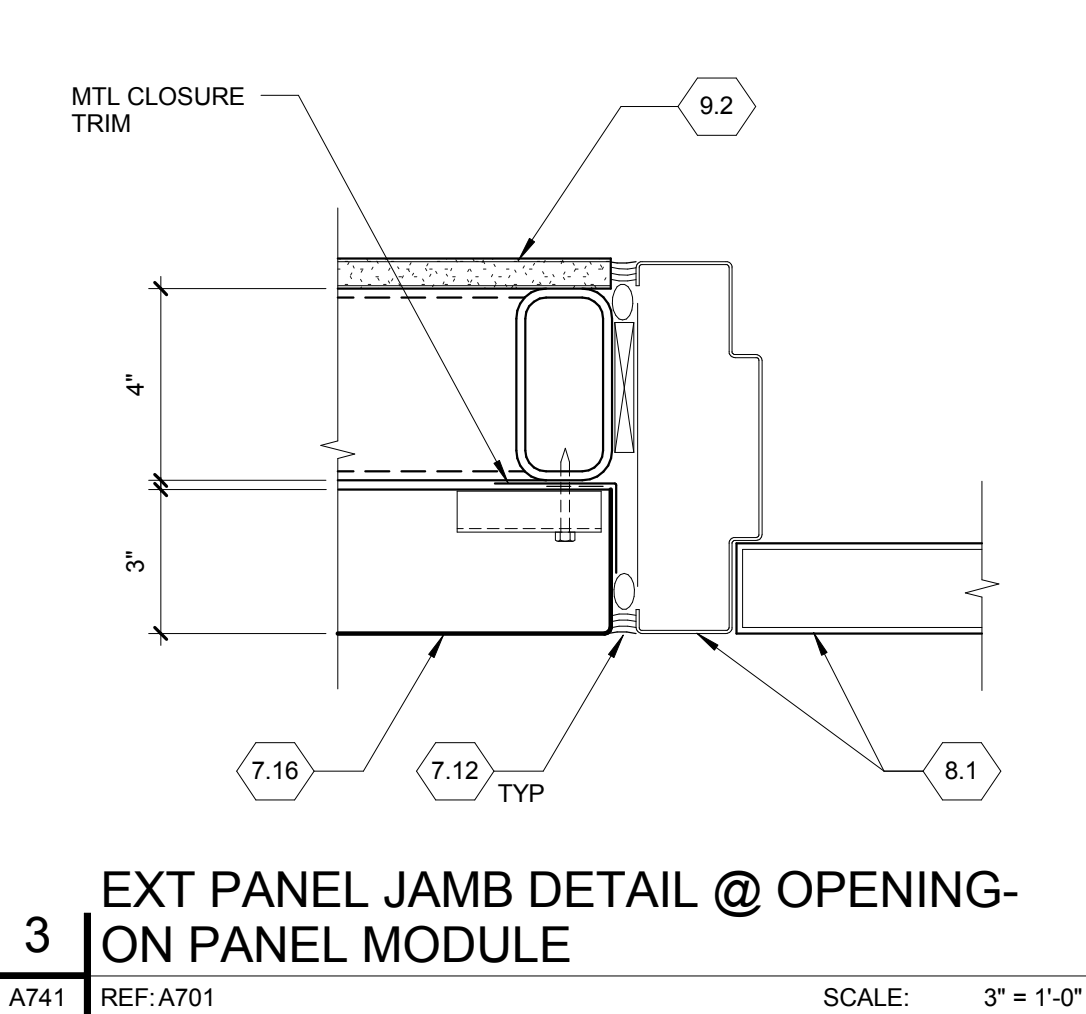
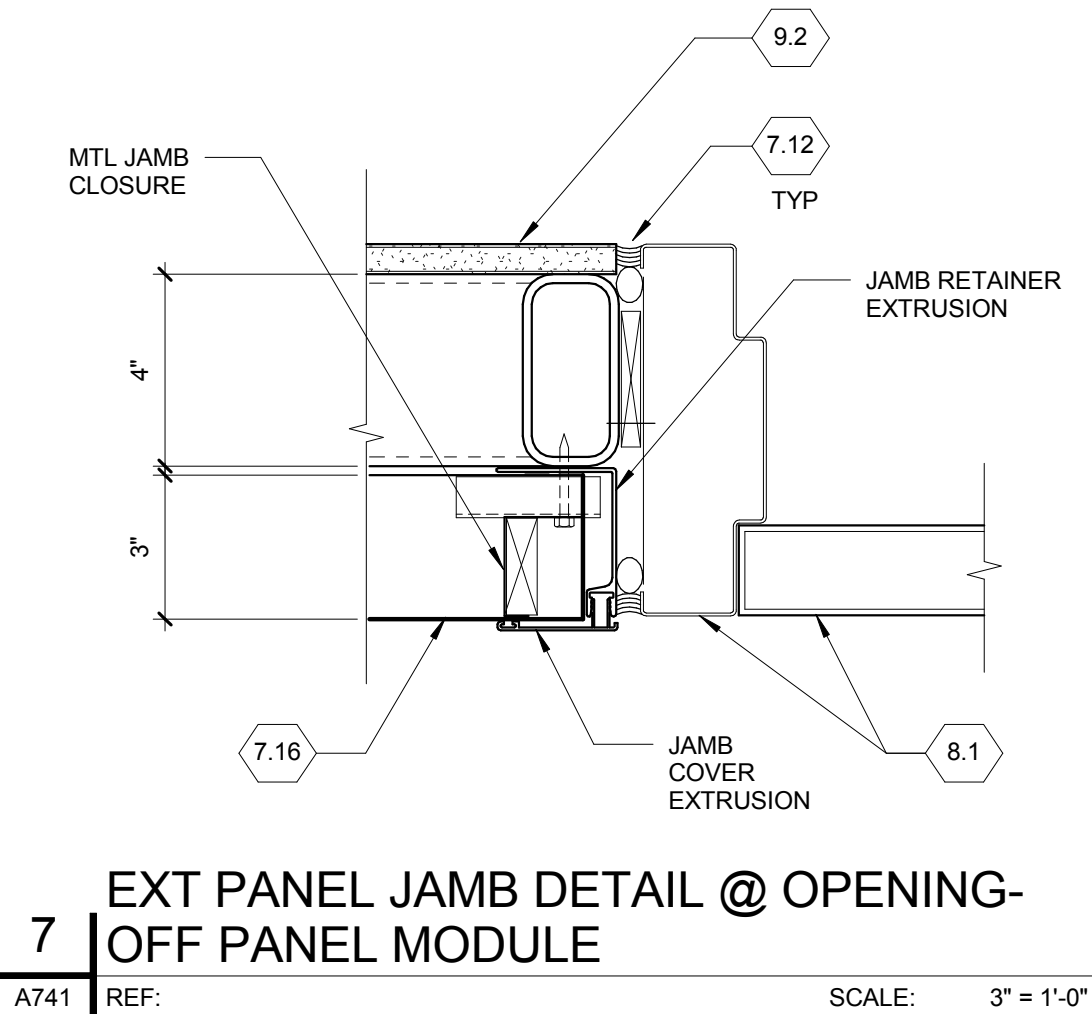
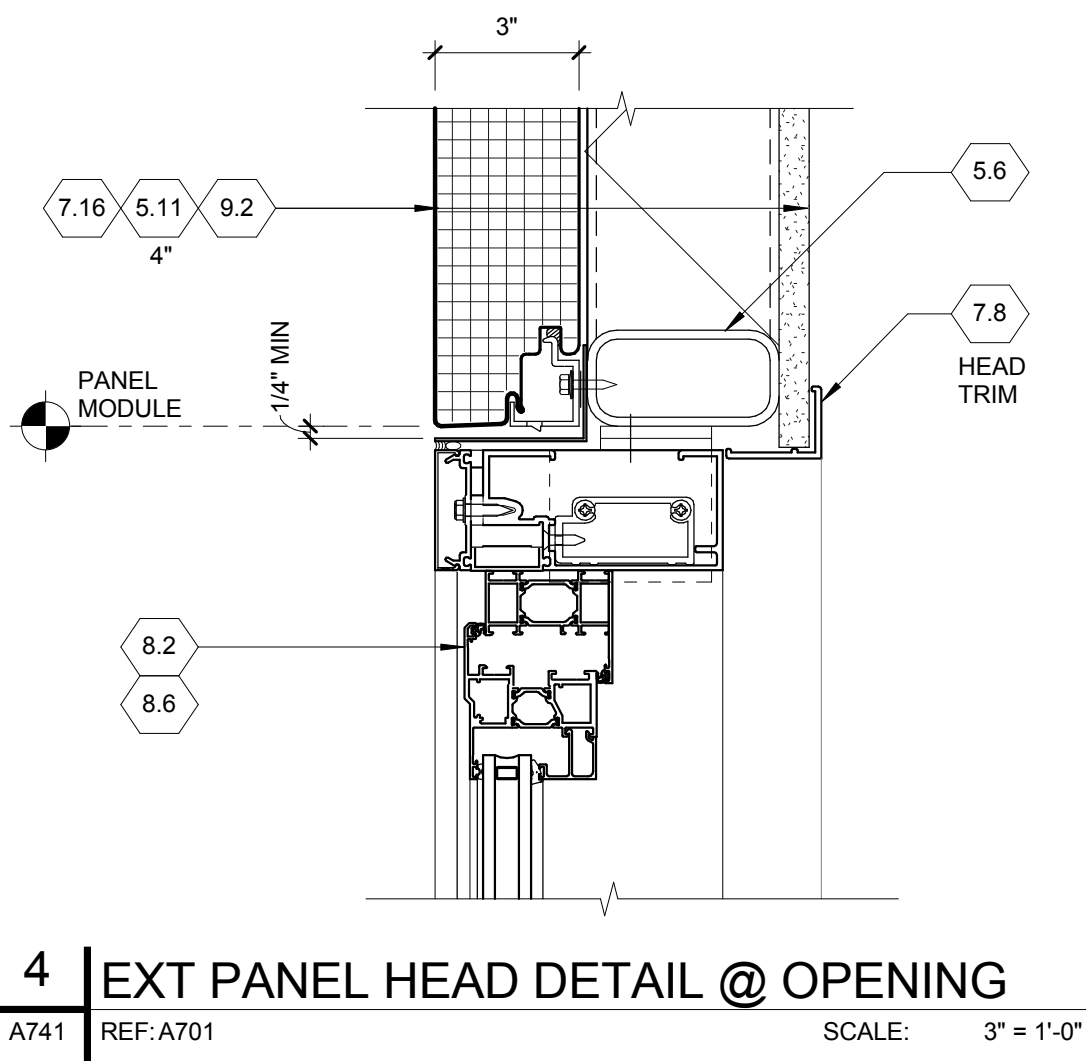
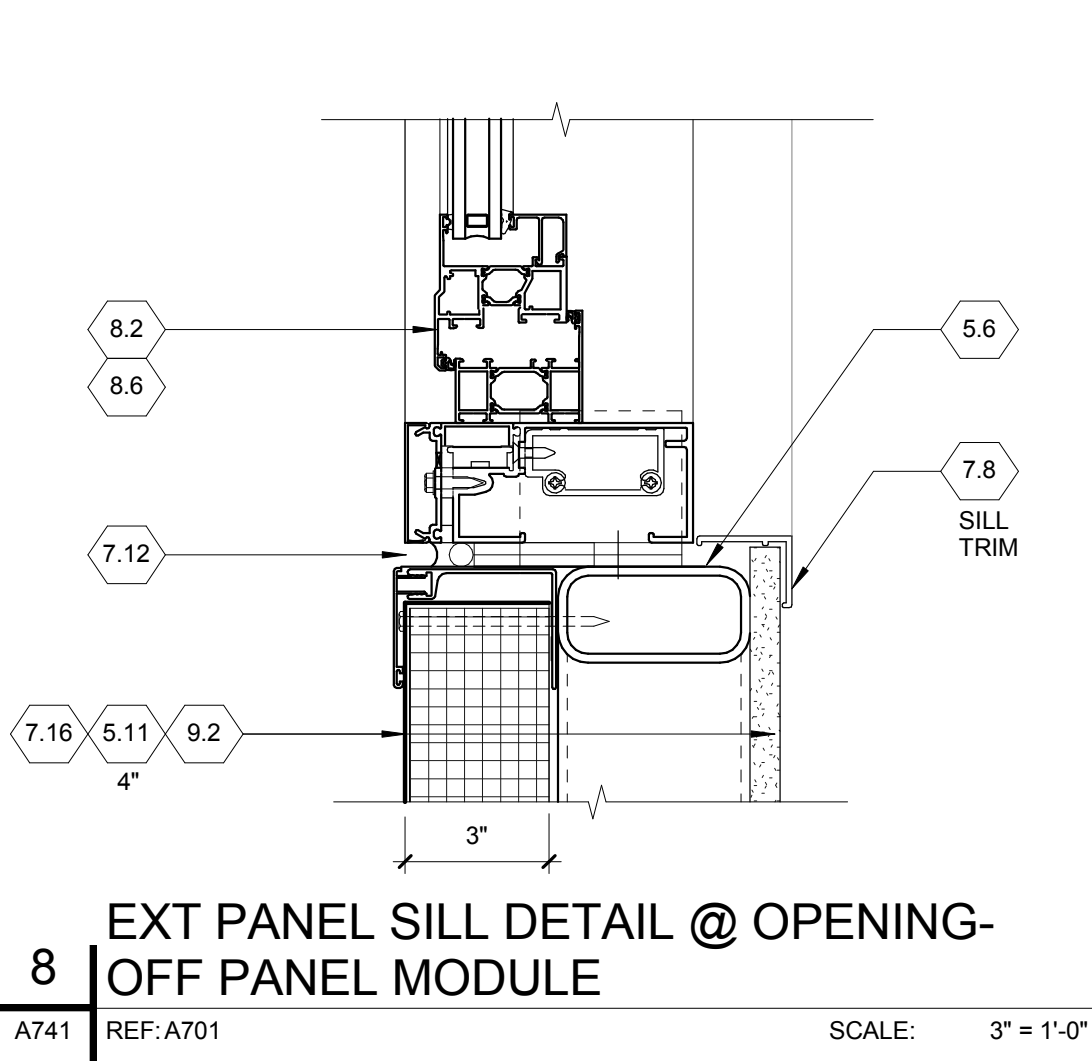
N232 COLLABORATIVE SUPPORT FACILITY

CONNECTOR DETAILS

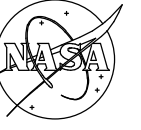
A731

MATERIAL KEYNOTES

<div>DIVISION 03 - CONCRETE</div> <div>3.1 CAST IN PLACE CONCRETE</div> <div>3.2 6" CONC HOUSEKEEPING PAD</div> <div>3.3 VAPOR BARRIER</div> <div>3.4 GRANULAR FILL</div> <div>3.5 CANE DETECTION AREA</div> <div>DIVISION 05 - METALS</div> <div>5.1 STEEL BEAM</div> <div>5.2 STEEL COLUMN</div> <div>5.3 METAL DECK</div> <div>5.4 STEEL ANGLE</div> <div>5.5 STEEL PLATE</div> <div>5.6 TUBULAR STEEL</div> <div>5.7 STEEL BENT PLATE</div> <div>5.8 STAINLESS STEEL FRAME</div> <div>5.9 OPEN WEB STEEL JOIST</div> <div>5.10 NOT USED</div> <div>5.11 EXT. COLD FORMED METAL FRAMING, SEE STRUCT.</div> <div>5.12 NOT USED</div> <div>5.13 GUARDRAIL</div> <div>5.14 HANDRAIL</div> <div>5.15 METAL FRAMED STAIR</div> <div>5.16 TEEL CHANNEL</div> <div>5.17 VISUALLY CONTRASTING STAINLESS STEEL STRIP, SEE SHEET 1/A002 FOR ACCESSIBILITY REQUIREMENTS</div> <div>DIVISION 06 - WOOD, PLASTIC & COMPOSITES</div> <div>6.1 WOOD BLOCK/NAILER, PRESSURE TREATED</div> <div>6.2 3/4" PLYWOOD, FIRE RETARDANT TREATED</div> <div>6.3 5/8" GLASS MAT FACED GYP SHEATHING</div> <div>6.4 PLASTIC LAMINATE</div> <div>6.5 SOLID-SURFACING MATERIAL COUNTERTOP</div> <div>6.6 RECYCLED WOOD TREAD</div> <div>DIVISION 07 - THERMAL & MOISTURE PROTECTION</div> <div>7.1 STAINLESS STEEL FLASHING/COUNTERFLASHING</div> <div>7.2 THERMOPLASTIC MEMBRANE ROOFING</div> <div>7.3 MEMBRANE EDGE FASTENER @ 12" O/C</div> <div>7.4 SAND COATED ROOF WALKWAY</div> <div>7.5 RIGID ROOF INSULATION OF AGED R=30 (UON)</div> <div>7.6 BATT INSULATION R=19</div> <div>7.7 PVC MEMBRANE FLASHING</div> <div>7.8 EXTRUDED ALUM TRIM</div> <div>7.9 ALUM FLASHING</div> <div>7.10 FORMED SHEET SS COPING</div> <div>7.11 BELOW GRADE DAMP/WATERPROOFING</div> <div>7.12 SEALANT WITH BACKER ROD</div> <div>7.13 20 GA GALVANIZED SPLASH PAN</div> <div>7.14 DOWN SPOUT</div> <div>7.15 WATERPROOFING MEMBRANE</div> <div>7.16 INSULATED METAL PANEL CLADDING</div> <div>7.17 ROOF SEISMIC JOINT COVER</div> <div>7.18 EXTERIOR WALL SEISMIC JOINT COVER</div> <div>7.19 INTERIOR WALL SEISMIC JOINT COVER</div> <div>7.20 CEILING SEISMIC JOINT COVER</div> <div>7.21 FIRESTOPPING</div> <div>7.22 SAND COATED ROOF WALKWAY</div> <div>7.23 METAL SPANDREL PANEL (INSULATED)</div> <div>7.24 THERMOPLASTIC MEMBRANE PARAPET FLASHING</div> <div>7.25 THERMOPLASTIC MEMBRANE COVER STRIP, HOT-AIR WELDED</div> <div>7.26 EXTRUDED ALUM BAR W/ FASTENERS @ 12" O.C. MAX</div> <div>7.27 FLOOR SEISMIC JOINT COVER</div> <div>7.28 S.S. PERFORATED RIBBED METAL (20 GA)</div> <div>7.29 METAL PANEL SOFFIT</div> <div>DIVISION 08 - OPENINGS</div> <div>8.1 DOOR & FRAME</div> <div>8.2 MOTORIZED OPERABLE WINDOW</div> <div>8.3 MANUAL OPERABLE WINDOW</div> <div>8.4 AUTOMATIC DOOR BOTTOM</div> <div>8.5 THRESHOLD</div> <div>8.6 GLAZED ALUM CURTAIN WALL SYSTEM</div> <div>8.7 1" INSULATED GLAZING</div> <div>8.8 FRITTED GLAZING</div> <div>8.9 SPANDREL GLAZING</div> <div>8.10 VISION GLASS (SAFETY WHERE REQUIRED)</div> <div>8.11 RECYCLED GLAZING</div> <div>8.12 AUTOMATIC ENTRANCE DOOR</div> <div>8.13 SKYLIGHT</div> <div>8.14 WEATHERSTRIPPING</div> <div>8.15 MTL SECURITY GATE</div> <div>8.16 DOOR PULL</div> <div>DIVISION 09 - FINISHES</div> <div>9.1 1/2" GWB TYPE X</div> <div>9.2 5/8" GWB TYPE X</div> <div>9.3 1" GWB SHAFT LINER</div> <div>9.4 20 GA MTL STUD @ 16" O/C</div> <div>9.5 SLOTTED TOP TRACK</div> <div>9.6 METAL STUD TRACK</div> <div>9.7 COLD FORMED FURRING CHANNEL</div> <div>9.8 SHAFT WALL STUD MIN 20 GA @ 24" O/C</div> <div>9.9 FRAMING ANGLE, MIN 20 GA GALV</div> <div>9.10 FURRING CHANNEL MIN 20 GA, SIZE AS NOTED</div> <div>9.11 SHAFT J RUNNER</div> <div>9.12 CERAMIC TILE</div> <div>9.13 REINFORCED MORTAR SETTING BED</div> <div>9.14 SCHEDULED FLOORING</div> <div>9.15 SUSPENDED GYP BOARD CEILING SYSTEM</div> <div>9.16 SCHEDULED WALL BASE</div> <div>9.17 PAINT</div> <div>9.18 5/8" CEMENTITIOUS TILE BACKER BOARD</div> <div>9.19 5/8" GLASS MAT FACED TILE BACKER BOARD</div> <div>9.20 NOT USED</div> <div>9.21 SOUND ATTENUATION BLANKET</div> <div>9.22 ACOUSTICAL INSULATION 3" (UON)</div> <div>9.23 SUSPENDED ACOUSTICAL CEILING</div> <div>DIVISION 10 - SPECIALTIES</div> <div>10.1 TOILET PARTITION</div> <div>10.2 FIXED SUNSCREEN (BIPV @ BID ALTERNATE)</div> <div>10.3 METAL LOCKER</div> <div>10.4 FIRE EXTINGUISHER CABINET</div> <div>10.5 DOOR STOP</div> <div>10.6 ALUM LIGHT SHELF (BID ALTERNATE)</div> <div>10.7 VINE CABLE SYSTEM</div> <div>10.8 EXTRUDED ALUM LOUVER AIRFOIL</div> <div>10.9 NOT USED</div> <div>10.10 ACCESS FLOORING- 10" HIGH</div> <div>DIVISION 11 - EQUIPMENT</div> <div>11.1 MOTORIZED PROJECTION SCREEN</div> <div>11.2 PROJECTOR</div> <div>DIVISION 12 - FURNISHINGS</div> <div>12.1 MOTORIZED WINDOW SHADE</div> <div>12.2 SYSTEM FURNITURE, NIC</div> <div>12.3 ENTRANCE FLOOR MAT & FRAME</div> <div>DIVISION 14 - EQUIPMENT</div> <div>14.1 HYDRAULIC HOLELESS ELEVATOR, 3500 LB</div> <div>DIVISION 22 - PLUMBING</div> <div>22.1 ROOF DRAIN</div> <div>22.2 OVERFLOW SCUPPER</div> <div>22.3 VENT THROUGH ROOF</div> <div>22.4 ELECTRIC WATER COOLER</div> <div>22.5 KITCHEN SINK</div> <div>22.6 SERVICE SINK</div> <div>22.7 FLOOR DRAIN</div> <div>22.8 FILTERED WATER SYSTEM FAUCET</div> <div>22.9 DUAL FLUSH TOILET @ WOMEN'S</div> <div>22.10 HIGH EFFICIENCY TOILET @ MEN'S</div> <div>22.11 LOW CONSUMPTION URINAL</div> <div>22.12 COUNTERTOP SINK</div> <div>22.13 ELECTRONIC LAVATORY FAUCET, TYP.</div> <div>22.14 HAND SHOWER SET WITH SLIDE BAR</div> <div>22.15 URINAL ELECTRONIC FLUSH VALVE</div> <div>DIVISION 23 - HVAC</div> <div>23.1 BOILER FLUE</div> <div>23.2 DUCT</div> <div>23.3 PERIMETER HYDRONIC HEATER</div> <div>23.4 FIRE DAMPER</div> <div>23.5 RADIANT CEILING PANEL</div> <div>23.6 MECHANICAL SHAFT OPENING</div> <div>23.7 RADIANT FLOOR SLAB SYSTEM</div>
--



PROJECT STATUS		
PRELIMINARY - NOT FOR CONSTRUCTION		
ISSUE	DATE	DESCRIPTION
1	10/20/2008	30% PRICING
2	11/07/2008	30% DESIGN REVISION
3	12/12/2008	60% INTERNAL QA/QC & COST ESTIMATE
4	12/19/2008	60% PRE-FINAL, NASA REVIEW
5	01/19/2009	60% FINAL ISSUE TO NASA
6	02/16/2009	90% QAQC & COST ESTIMATE
MARK	DATE	DESCRIPTION
DRAWN	G JOHNSON	DATE
DESIGNED	WM+P	DATE
CHECKED	R PRADHAN	DATE
PROJMG		DATE
REQUESTOR		DATE
R&GA		DATE
SAFETY		DATE
SUPERVISOR		DATE
SIZE	CASE CODE	DESCRIPTION
D	25307	A232-0800-
SCALE	INDEX	SHEET
		OF

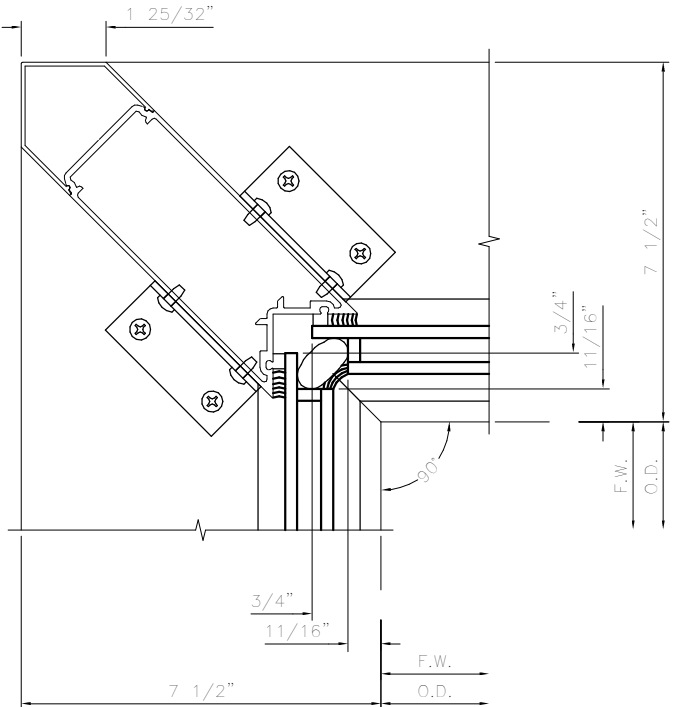
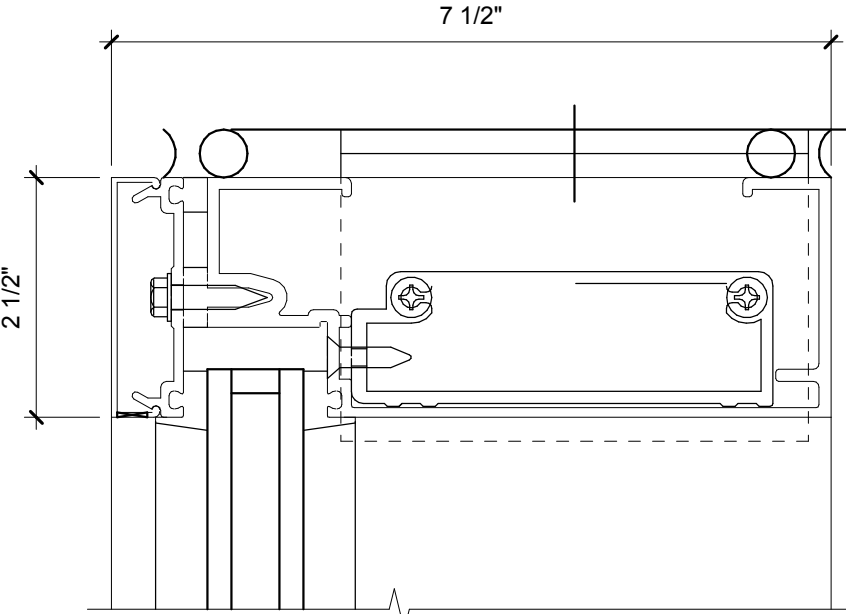
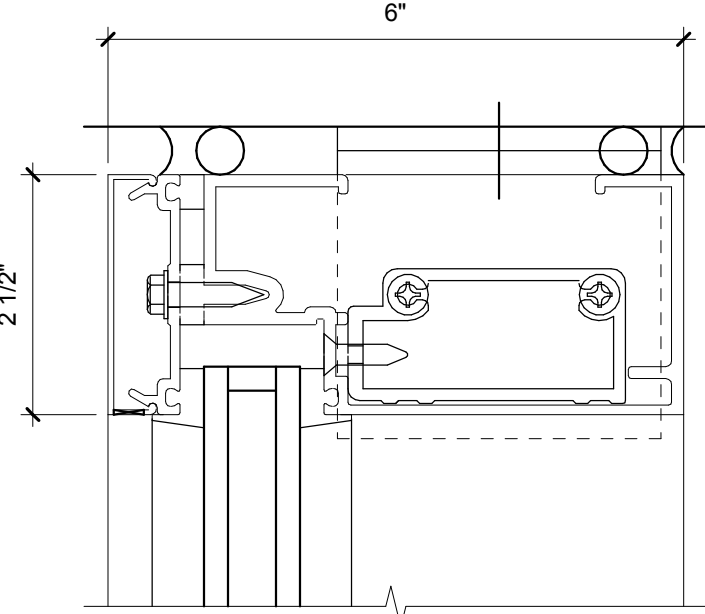
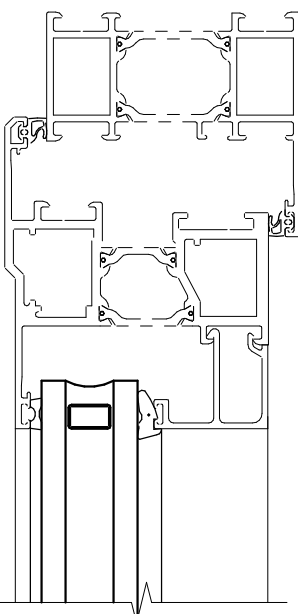
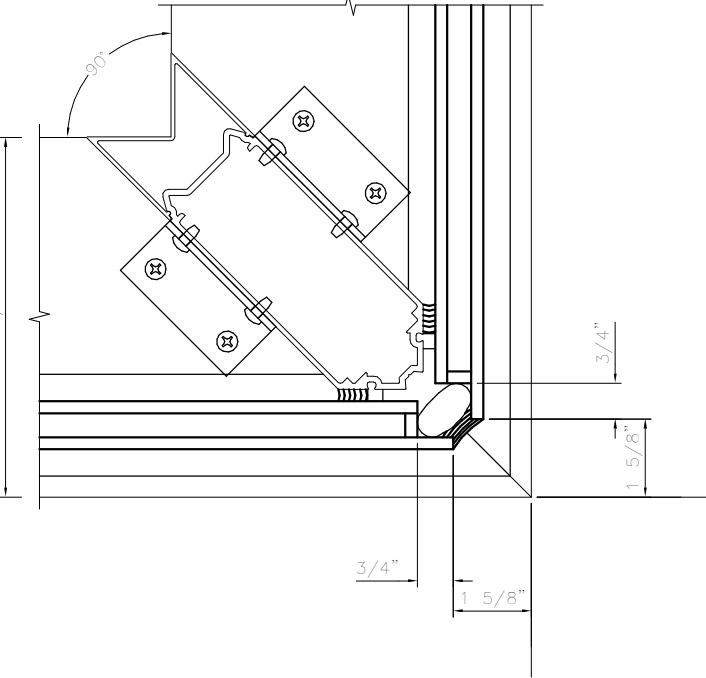
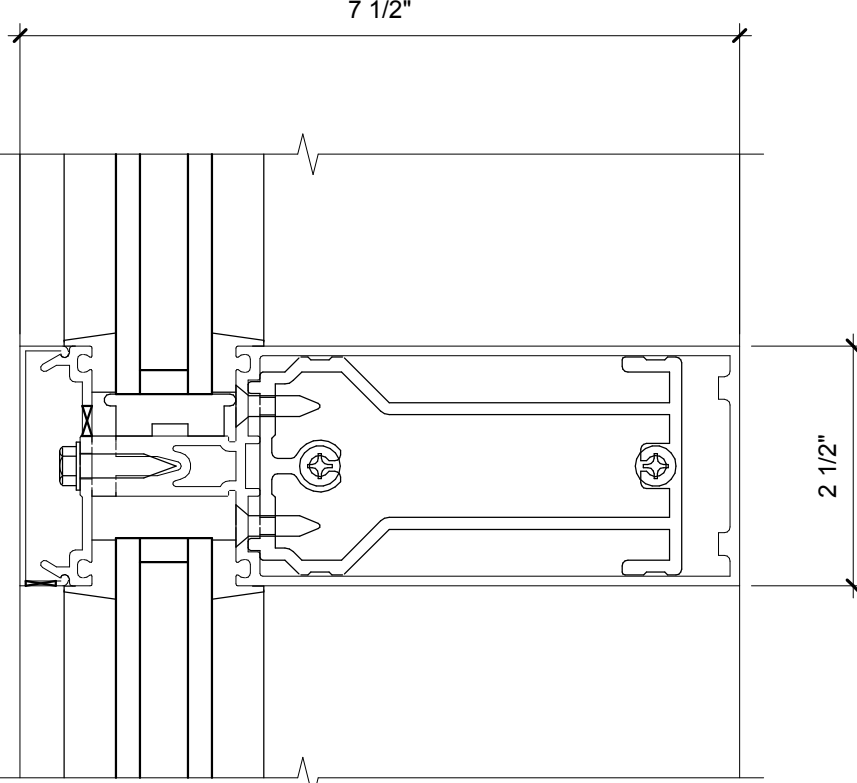
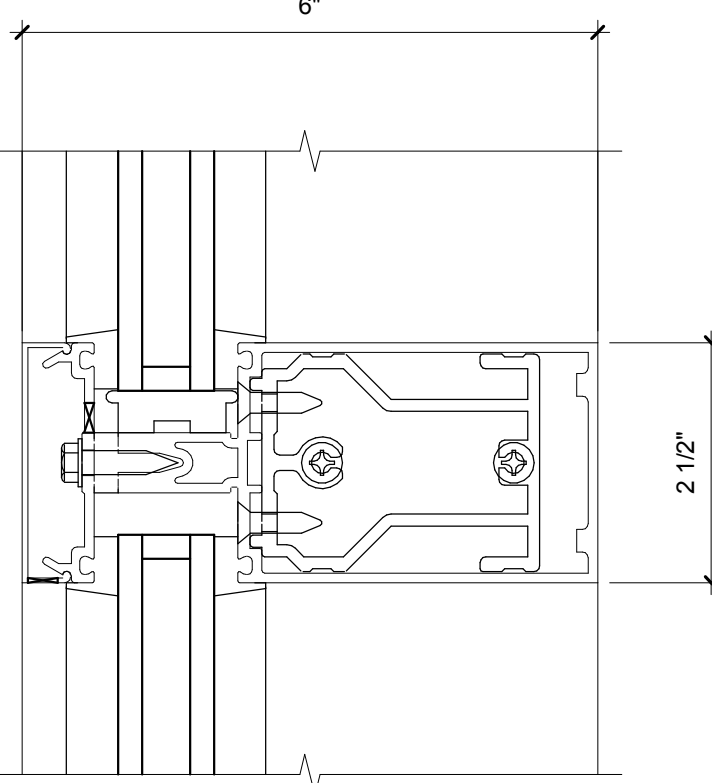
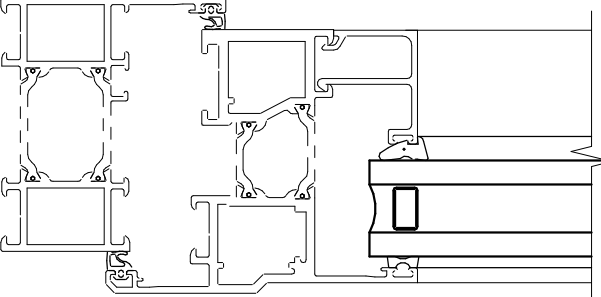
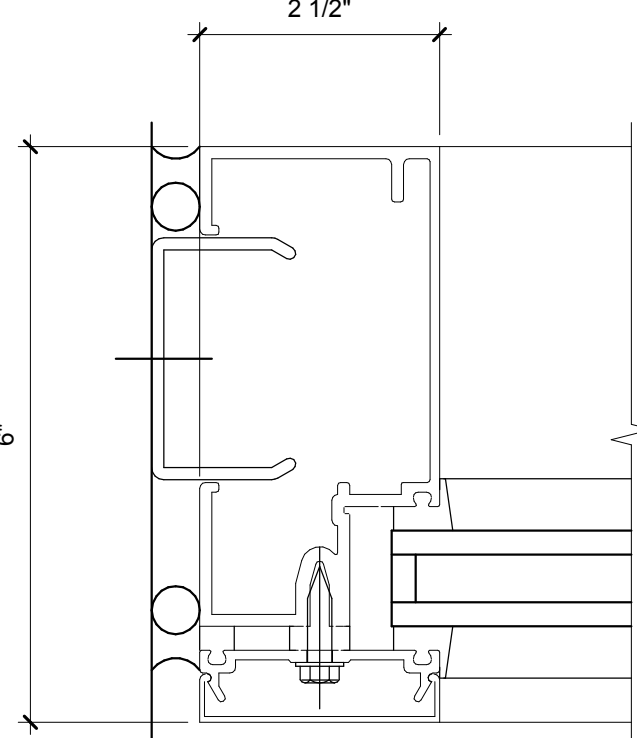
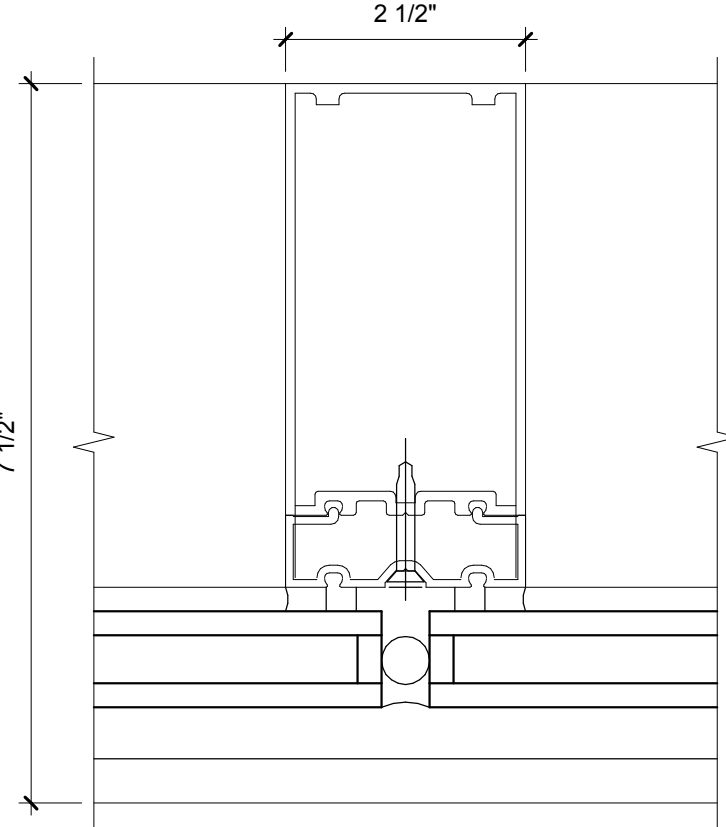
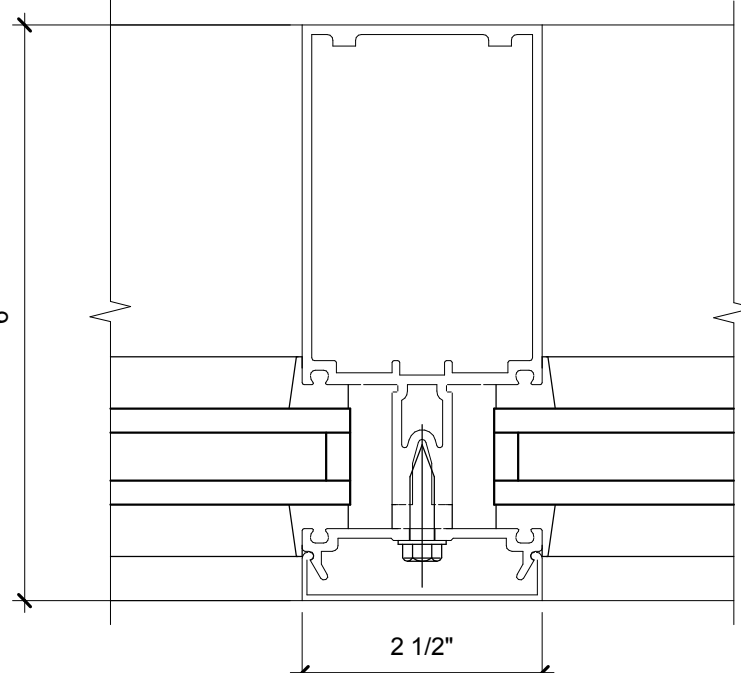
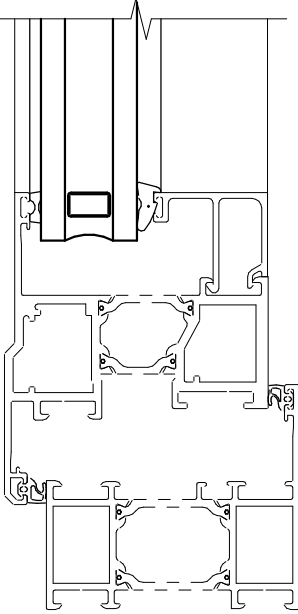
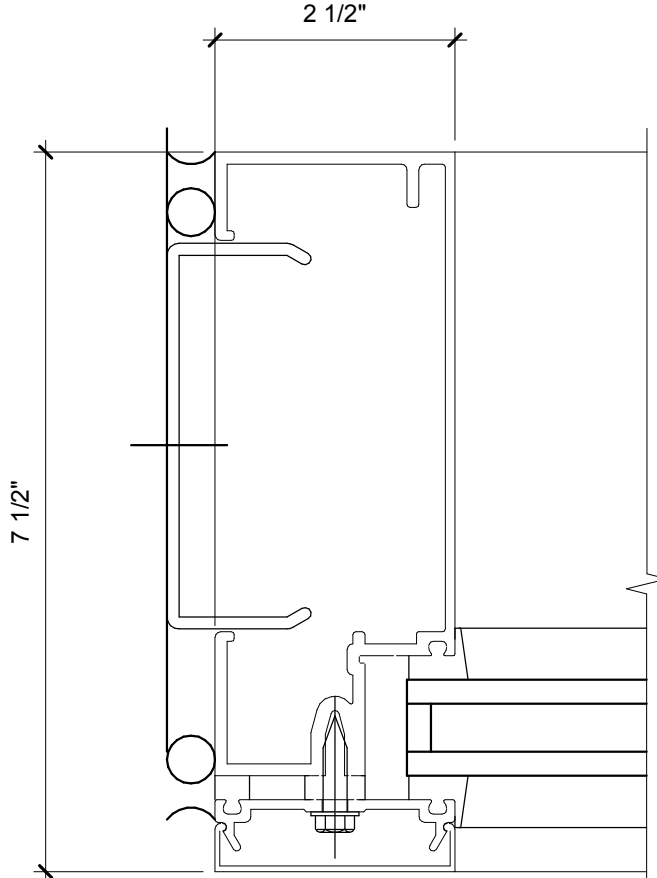
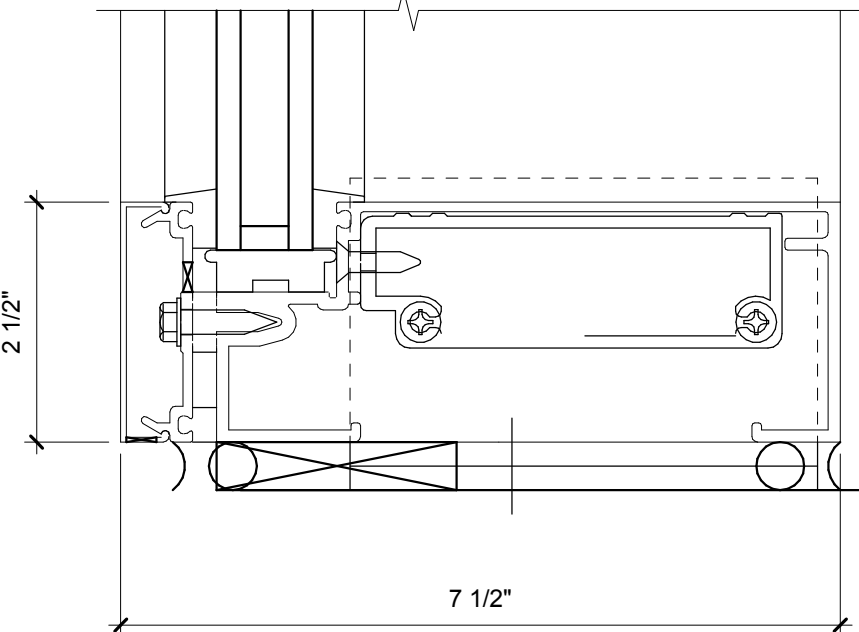
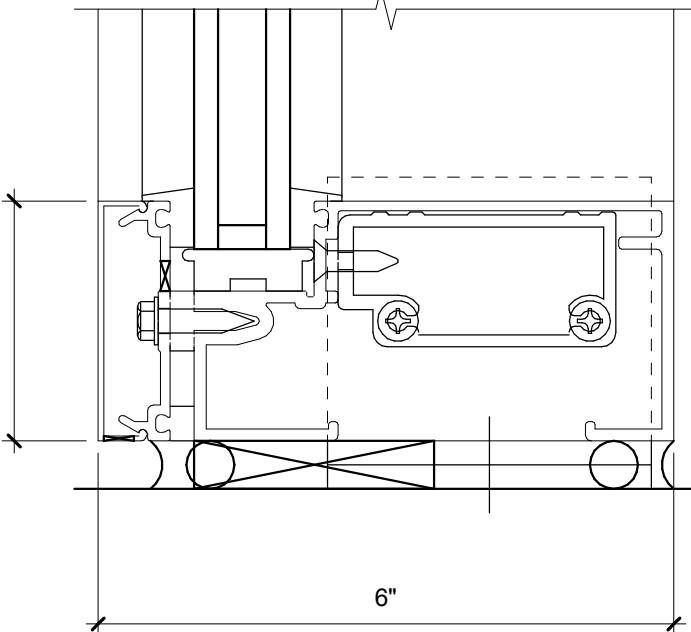
 **Ames Research Center**
Moffet Field, California

N232 COLLABORATIVE SUPPORT FACILITY

DOOR & OPENING DETAILS

A741

2/16/2009 6:16:17 PM

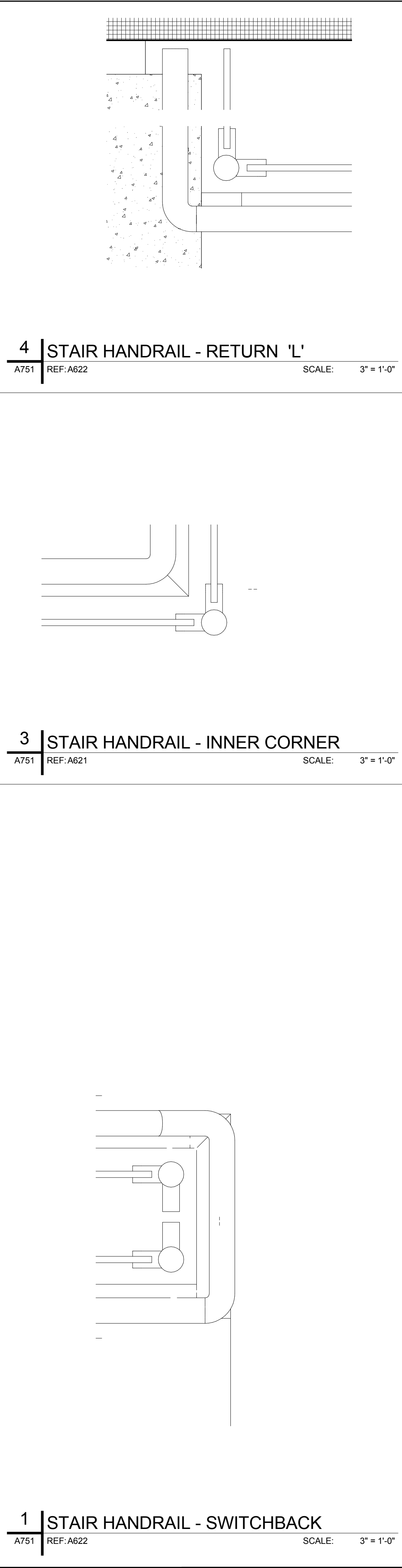
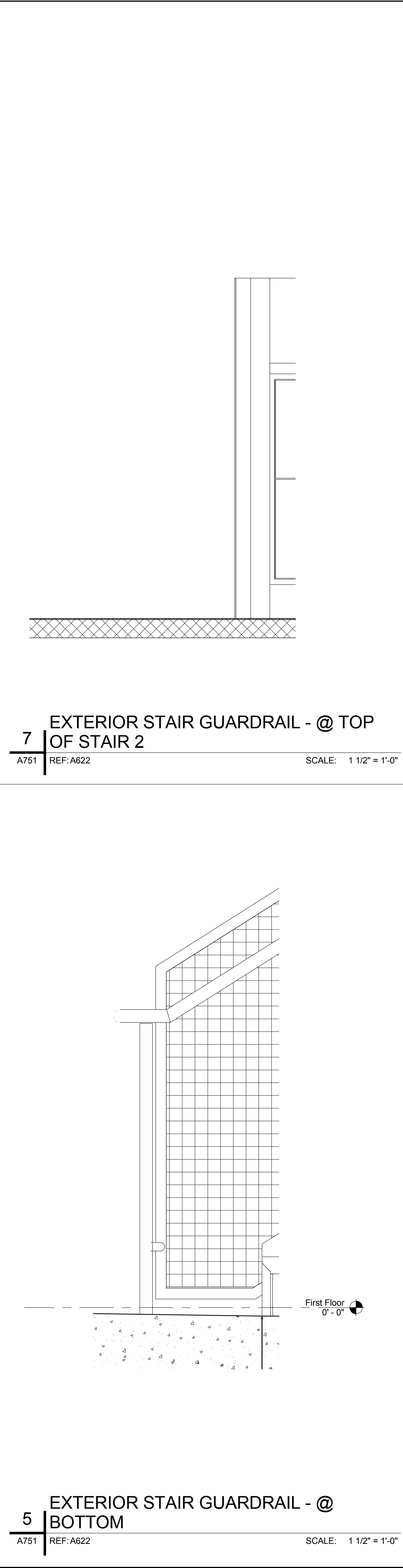
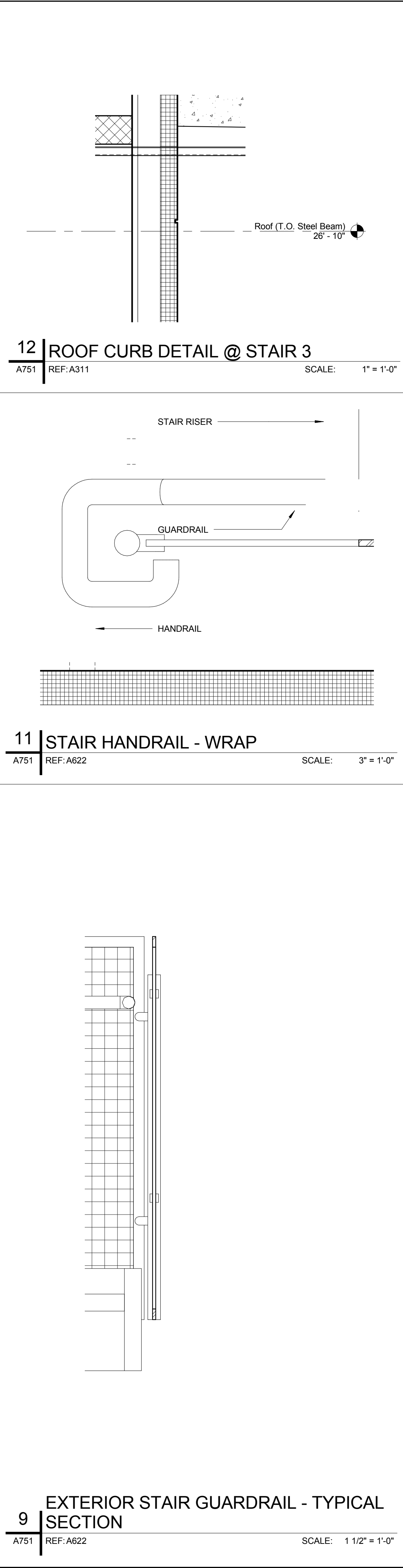
	 <div><div>12</div><div>CURTAIN WALL INSIDE CORNER DETAIL (PROFILE B)</div><div>A742REF: A103SCALE: 3" = 1'-0"</div></div>	 <div><div>8</div><div>CURTAIN WALL HEAD DETAIL (PROFILE B)</div><div>A742REF: A103SCALE: 6" = 1'-0"</div></div>	 <div><div>4</div><div>CURTAIN WALL HEAD DETAIL (PROFILE A)</div><div>A742REF: A103SCALE: 6" = 1'-0"</div></div>
 <div><div>15</div><div>CURTAIN WALL WINDOW HEAD DETAIL</div><div>A742REF: A103SCALE: 6" = 1'-0"</div></div>	 <div><div>11</div><div>CURTAIN WALL OUTSIDE CORNER DETAIL (PROFILE B)</div><div>A742REF: A103SCALE: 3" = 1'-0"</div></div>	 <div><div>7</div><div>CURTAIN WALL HORIZONTAL DETAIL (PROFILE B)</div><div>A742REF: A103SCALE: 6" = 1'-0"</div></div>	 <div><div>3</div><div>CURTAIN WALL HORIZONTAL DETAIL (PROFILE A)</div><div>A742REF: SCALE: 6" = 1'-0"</div></div>
 <div><div>14</div><div>CURTAIN WALL WINDOW JAMB DETAIL</div><div>A742REF: A103SCALE: 6" = 1'-0"</div></div>	 <div><div>10</div><div>CURTAIN WALL PERIMETER JAMB DETAIL (PROFILE A)</div><div>A742REF: A103SCALE: 6" = 1'-0"</div></div>	 <div><div>6</div><div>CURTAIN WALL VERTICAL JAMB DETAIL (PROFILE B)</div><div>A742REF: A103SCALE: 6" = 1'-0"</div></div>	 <div><div>2</div><div>CURTAIN WALL VERTICAL JAMB DETAIL (PROFILE A)</div><div>A742REF: A103SCALE: 6" = 1'-0"</div></div>
 <div><div>13</div><div>CURTAIN WALL WINDOW SILL DETAIL</div><div>A742REF: SCALE: 6" = 1'-0"</div></div>	 <div><div>9</div><div>CURTAIN WALL PERIMETER JAMB DETAIL (PROFILE B)</div><div>A742REF: A103SCALE: 6" = 1'-0"</div></div>	 <div><div>5</div><div>CURTAIN WALL SILL DETAIL (PROFILE B)</div><div>A742REF: A103SCALE: 6" = 1'-0"</div></div>	 <div><div>1</div><div>CURTAIN WALL SILL DETAIL (PROFILE A)</div><div>A742REF: A103SCALE: 6" = 1'-0"</div></div>

MATERIAL KEYNOTES

<div>DIVISION 03 - CONCRETE</div> <div>3.1 CAST IN PLACE CONCRETE</div> <div>3.2 6" CONC HOUSEKEEPING PAD</div> <div>3.3 VAPOR BARRIER</div> <div>3.4 GRANULAR FILL</div> <div>3.5 CANE DETECTION AREA</div> <div>DIVISION 05 - METALS</div> <div>5.1 STEEL BEAM</div> <div>5.2 STEEL COLUMN</div> <div>5.3 METAL DECK</div> <div>5.4 STEEL ANGLE</div> <div>5.5 STEEL PLATE</div> <div>5.6 TUBULAR STEEL</div> <div>5.7 STEEL BENT PLATE</div> <div>5.8 STAINLESS STEEL FRAME</div> <div>5.9 OPEN WEB STEEL JOIST</div> <div>5.10 NOT USED</div> <div>5.11 EXT. COLD FORMED METAL FRAMING, SEE STRUCT.</div> <div>5.12 NOT USED</div> <div>5.13 GUARDRAIL</div> <div>5.14 HANDRAIL</div> <div>5.15 METAL FRAMED STAIR</div> <div>5.16 TEEL CHANNEL</div> <div>5.17 VISUALLY CONTRASTING STAINLESS STEEL STRIP, SEE SHEET 1/A002 FOR ACCESSIBILITY REQUIREMENTS</div> <div>DIVISION 06 - WOOD, PLASTIC & COMPOSITES</div> <div>6.1 WOOD BLOCK/NAILER, PRESSURE TREATED</div> <div>6.2 3/4" PLYWOOD, FIRE RETARDANT TREATED</div> <div>6.3 5/8" GLASS MAT FACED GYP SHEATHING</div> <div>6.4 PLASTIC LAMINATE</div> <div>6.5 SOLID-SURFACING MATERIAL COUNTERTOP</div> <div>6.6 RECYCLED WOOD TREAD</div> <div>DIVISION 07 - THERMAL & MOISTURE PROTECTION</div> <div>7.1 STAINLESS STEEL FLASHING/COUNTERFLASHING</div> <div>7.2 THERMOPLASTIC MEMBRANE ROOFING</div> <div>7.3 MEMBRANE EDGE FASTENER @ 12" O/C</div> <div>7.4 SAND COATED ROOF WALKWAY</div> <div>7.5 RIGID ROOF INSULATION OF AGED R=30 (UON)</div> <div>7.6 BATT INSULATION R=19</div> <div>7.7 PVC MEMBRANE FLASHING</div> <div>7.8 EXTRUDED ALUM TRIM</div> <div>7.9 ALUM FLASHING</div> <div>7.10 FORMED SHEET SS COPING</div> <div>7.11 BELOW GRADE DAMP/WATERPROOFING</div> <div>7.12 SEALANT WITH BACKER ROD</div> <div>7.13 20 GA GALVANIZED SPLASH PAN</div> <div>7.14 DOWN SPOUT</div> <div>7.15 WATERPROOFING MEMBRANE</div> <div>7.16 INSULATED METAL PANEL CLADDING</div> <div>7.17 ROOF SEISMIC JOINT COVER</div> <div>7.18 EXTERIOR WALL SEISMIC JOINT COVER</div> <div>7.19 INTERIOR WALL SEISMIC JOINT COVER</div> <div>7.20 CEILING SEISMIC JOINT COVER</div> <div>7.21 FIRESTOPPING</div> <div>7.22 SAND COATED ROOF WALKWAY</div> <div>7.23 METAL SPANDREL PANEL (INSULATED)</div> <div>7.24 THERMOPLASTIC MEMBRANE PARAPET FLASHING</div> <div>7.25 THERMOPLASTIC MEMBRANE COVER STRIP, HOT-AIR WELDED</div> <div>7.26 EXTRUDED ALUM BAR W/ FASTENERS @ 12" O.C. MAX</div> <div>7.27 FLOOR SEISMIC JOINT COVER</div> <div>7.28 S.S. PERFORATED RIBBED METAL (20 GA)</div> <div>7.29 METAL PANEL SOFFIT</div> <div>DIVISION 08 - OPENINGS</div> <div>8.1 DOOR & FRAME</div> <div>8.2 MOTORIZED OPERABLE WINDOW</div> <div>8.3 MANUAL OPERABLE WINDOW</div> <div>8.4 AUTOMATIC DOOR BOTTOM</div> <div>8.5 THRESHOLD</div> <div>8.6 GLAZED ALUM CURTAIN WALL SYSTEM</div> <div>8.7 1" INSULATED GLAZING</div> <div>8.8 FRITTED GLAZING</div> <div>8.9 SPANDREL GLAZING</div> <div>8.10 VISION GLASS (SAFETY WHERE REQUIRED)</div> <div>8.11 RECYCLED GLAZING</div> <div>8.12 AUTOMATIC ENTRANCE DOOR</div> <div>8.13 SKYLIGHT</div> <div>8.14 WEATHERSTRIPPING</div> <div>8.15 MTL SECURITY GATE</div> <div>8.16 DOOR PULL</div> <div>DIVISION 09 - FINISHES</div> <div>9.1 1/2" GWB TYPE X</div> <div>9.2 5/8" GWB TYPE X</div> <div>9.3 1" GWB SHAFT LINER</div> <div>9.4 20 GA MTL STUD @ 16" O/C</div> <div>9.5 SLOTTED TOP TRACK</div> <div>9.6 METAL STUD TRACK</div> <div>9.7 COLD FORMED FURRING CHANNEL</div> <div>9.8 SHAFT WALL STUD MIN 20 GA @ 24" O/C</div> <div>9.9 FRAMING ANGLE, MIN 20 GA GALV</div> <div>9.10 FURRING CHANNEL MIN 20 GA, SIZE AS NOTED</div> <div>9.11 SHAFT J RUNNER</div> <div>9.12 CERAMIC TILE</div> <div>9.13 REINFORCED MORTAR SETTING BED</div> <div>9.14 SCHEDULED FLOORING</div> <div>9.15 SUSPENDED GYP BOARD CEILING SYSTEM</div> <div>9.16 SCHEDULED WALL BASE</div> <div>9.17 PAINT</div> <div>9.18 5/8" CEMENTITIOUS TILE BACKER BOARD</div> <div>9.19 5/8" GLASS MAT FACED TILE BACKER BOARD</div> <div>9.20 NOT USED</div> <div>9.21 SOUND ATTENUATION BLANKET</div> <div>9.22 ACOUSTICAL INSULATION 3" (UON)</div> <div>9.23 SUSPENDED ACOUSTICAL CEILING</div>	<div>DIVISION 10 - SPECIALTIES</div> <div>10.1 TOILET PARTITION</div> <div>10.2 FIXED SUNSCREEN (BIPV @ BID ALTERNATE)</div> <div>10.3 METAL LOCKER</div> <div>10.4 FIRE EXTINGUISHER CABINET</div> <div>10.5 DOOR STOP</div> <div>10.6 ALUM LIGHT SHELF (BID ALTERNATE)</div> <div>10.7 VINE CABLE SYSTEM</div> <div>10.8 EXTRUDED ALUM LOUVER AIRFOIL</div> <div>10.9 NOT USED</div> <div>10.10 ACCESS FLOORING- 10" HIGH</div> <div>DIVISION 11 - EQUIPMENT</div> <div>11.1 MOTORIZED PROJECTION SCREEN</div> <div>11.2 PROJECTOR</div> <div>DIVISION 12 - FURNISHINGS</div> <div>12.1 MOTORIZED WINDOW SHADE</div> <div>12.2 SYSTEM FURNITURE, NIC</div> <div>12.3 ENTRANCE FLOOR MAT & FRAME</div> <div>DIVISION 14 - EQUIPMENT</div> <div>14.1 HYDRAULIC HOLELESS ELEVATOR, 3500 LB</div> <div>DIVISION 22 - PLUMBING</div> <div>22.1 ROOF DRAIN</div> <div>22.2 OVERFLOW SCUPPER</div> <div>22.3 VENT THROUGH ROOF</div> <div>22.4 ELECTRIC WATER COOLER</div> <div>22.5 KITCHEN SINK</div> <div>22.6 SERVICE SINK</div> <div>22.7 FLOOR DRAIN</div> <div>22.8 FILTERED WATER SYSTEM FAUCET</div> <div>22.9 DUAL FLUSH TOILET @ WOMEN'S</div> <div>22.10 HIGH EFFICIENCY TOILET @ MEN'S</div> <div>22.11 LOW CONSUMPTION URINAL</div> <div>22.12 COUNTERTOP SINK</div> <div>22.13 ELECTRONIC LAVATORY FAUCET, TYP.</div> <div>22.14 HAND SHOWER SET WITH SLIDE BAR</div> <div>22.15 URINAL ELECTRONIC FLUSH VALVE</div> <div>DIVISION 23 - HVAC</div> <div>23.1 BOILER FLUE</div> <div>23.2 DUCT</div> <div>23.3 PERIMETER HYDRONIC HEATER</div> <div>23.4 FIRE DAMPER</div> <div>23.5 RADIANT CEILING PANEL</div> <div>23.6 MECHANICAL SHAFT OPENING</div> <div>23.7 RADIANT FLOOR SLAB SYSTEM</div>
---	--

PRELIMINARY - NOT FOR CONSTRUCTION

ISSUE	DATE	DESCRIPTION
1	10/20/2008	30% PRICING
2	11/07/2008	30% DESIGN REVISION
3	12/12/2008	60% INTERNAL QA/QC & COST ESTIMATE
4	12/19/2008	60% PRE-FINAL, NASA REVIEW
5	01/19/2009	60% FINAL ISSUE TO NASA
6	02/16/2009	90% QAQC & COST ESTIMATE
MARK	DATE	DESCRIPTION
DRAWN	Author	DATE
DESIGNED	Designer	DATE
CHECKED	Checker	DATE
PROJMG		DATE
REQUESTOR		DATE
R&GA		DATE
SAFETY		DATE
SUPERVISOR		DATE
SIZE	CASE CODE	A232-0800-
D	25307	A742
SCALE	INDEX	SHEET OF



DIVISION 03 - CONCRETE

3.1CAST IN PLACE CONCRETE

3.26" CONC HOUSEKEEPING PAD

3.3VAPOR BARRIER

3.4GRANULAR FILL

3.5CANE DETECTION AREA

DIVISION 05 - METALS

5.1STEEL BEAM

5.2STEEL COLUMN

5.3METAL DECK

5.4STEEL ANGLE

5.5STEEL PLATE

5.6TUBULAR STEEL

5.7STEEL BENT PLATE

5.8STAINLESS STEEL FRAME

5.9OPEN WEB STEEL JOIST

5.10NOT USED

5.11EXT. COLD FORMED METAL FRAMING, SEE STRUCT.

5.12NOT USED

5.13GUARDRAIL

5.14HANDRAIL

5.15METAL FRAMED STAIR

5.16TEEL CHANNEL

5.17VISUALLY CONTRASTING STAINLESS STEEL STRIP, SEE SHEET 11A002 FOR ACCESSIBILITY REQUIREMENTS

DIVISION 06 - WOOD, PLASTIC & COMPOSITES

6.1WOOD BLOCK/NAILER, PRESSURE TREATED

6.23/4" PLYWOOD, FIRE RETARDANT TREATED

6.35/8" GLASS MAT FACED GYP SHEATHING

6.4PLASTIC LAMINATE

6.5SOLID-SURFACING MATERIAL COUNTERTOP

6.6RECYCLED WOOD TREAD

DIVISION 07 - THERMAL & MOISTURE PROTECTION

7.1STAINLESS STEEL FLASHING/COUNTERFLASHING

7.2THERMOPLASTIC MEMBRANE ROOFING

7.3MEMBRANE EDGE FASTENER @ 12" O/C

7.4SAND COATED ROOF WALKWAY

7.5RIGID ROOF INSULATION OF AGED R=30 (UON)

7.6BATT INSULATION R=19

7.7PVC MEMBRANE FLASHING

7.8EXTRUDED ALUM TRIM

7.9ALUM FLASHING

7.10FORMED SHEET SS COPING

7.11BELOW GRADE DAMP/WATERPROOFING

7.12SEALANT WITH BACKER ROD

7.1320 GA GALVANIZED SPLASH PAN

7.14DOWN SPOUT

7.15WATERPROOFING MEMBRANE

7.16INSULATED METAL PANEL CLADDING

7.17ROOF SEISMIC JOINT COVER

7.18EXTERIOR WALL SEISMIC JOINT COVER

7.19INTERIOR WALL SEISMIC JOINT COVER

7.20CEILING SEISMIC JOINT COVER

7.21FIRESTOPPING

7.22SAND COATED ROOF WALKWAY

7.23METAL SPANDREL PANEL (INSULATED)

7.24THERMOPLASTIC MEMBRANE PARAPET FLASHING

7.25THERMOPLASTIC MEMBRANE COVER STRIP, HOT-AIR WELDED

7.26EXTRUDED ALUM BAR W/ FASTENERS @ 12" O.C MAX

7.27FLOOR SEISMIC JOINT COVER

7.28S.S. PERFORATED RIBBED METAL (20 GA)

7.29METAL PANEL SOFFIT

DIVISION 08 - OPENINGS

8.1DOOR & FRAME

8.2MOTORIZED OPERABLE WINDOW

8.3MANUAL OPERABLE WINDOW

8.4AUTOMATIC DOOR BOTTOM

8.5THRESHOLD

8.6GLAZED ALUM CURTAIN WALL SYSTEM

8.71" INSULATED GLAZING

8.8FRITTED GLAZING

8.9SPANDREL GLAZING

8.10VINYL GLASS (SAFETY WHERE REQUIRED)

8.11RECYCLED GLAZING

8.12AUTOMATIC ENTRANCE DOOR

8.13SKYLIGHT

8.14WEATHERSTRIPPING

8.15MTL SECURITY GATE

8.16DOOR PULL

DIVISION 09 - FINISHES

9.11/2" GWB TYPE X

9.25/8" GWB TYPE X

9.31" GWB SHAFT LINER

9.420 GA MTL STUD @ 16" O/C

9.5SLOTTED TOP TRACK

9.6METAL STUD TRACK

9.7COLD FORMED FURRING CHANNEL

9.8SHAFT WALL STUD MIN 20 GA @ 24" O/C

9.9FRAMING ANGLE, MIN 20 GA GALV

9.10FURRING CHANNEL MIN 20 GA, SIZE AS NOTED

9.11SHAFT J RUNNER

9.12CERAMIC TILE

9.13REINFORCED MORTAR SETTING BED

9.14SCHEDULED FLOORING

9.15SUSPENDED GYP BOARD CEILING SYSTEM

9.16SCHEDULED WALL BASE

9.17PAINT

9.185/8" CEMENTITIOUS TILE BACKER BOARD

9.195/8" GLASS MAT FACED TILE BACKER BOARD

9.20NOT USED

9.21SOUND ATTENUATION BLANKET

9.22ACOUSTICAL INSULATION 3" (UON)

9.23SUSPENDED ACOUSTICAL CEILING

DIVISION 10 - SPECIALTIES

10.1TOILET PARTITION

10.2FIXED SUNSCREEN (BIPV @ BID ALTERNATE)

10.3METAL LOCKER

10.4FIRE EXTINGUISHER CABINET

10.5DOOR STOP

10.6ALUM LIGHT SHELF (BID ALTERNATE)

10.7VINE CABLE SYSTEM

10.8EXTRUDED ALUM LOUVER AIRFOIL

10.9NOT USED

10.10ACCESS FLOORING- 10" HIGH

DIVISION 11 - EQUIPMENT

11.1MOTORIZED PROJECTION SCREEN

11.2PROJECTOR

DIVISION 12 - FURNISHINGS

12.1MOTORIZED WINDOW SHADE

12.2SYSTEM FURNITURE, NIC

12.3ENTRANCE FLOOR MAT & FRAME

DIVISION 14 - EQUIPMENT

14.1HYDRAULIC HOLELESS ELEVATOR, 3500 LB

DIVISION 22 - PLUMBING

22.1ROOF DRAIN

22.2OVERFLOW SCUPPER

22.3VENT THROUGH ROOF

22.4ELECTRIC WATER COOLER

22.5KITCHEN SINK

22.6SERVICE SINK

22.7FLOOR DRAIN

22.8FILTERED WATER SYSTEM FAUCET

22.9DUAL FLUSH TOILET @ WOMEN'S

22.10HIGH EFFICIENCY TOILET @ MEN'S

22.11LOW CONSUMPTION URINAL

22.12COUNTERTOP SINK

22.13ELECTRONIC LAVATORY FAUCET, TYP.

22.14HAND SHOWER SET WITH SLIDE BAR

22.15URINAL, ELECTRONIC FLUSH VALVE

DIVISION 23 - HVAC

23.1BOILER FLUE

23.2DUCT

23.3PERIMETER HYDRONIC HEATER

23.4FIRE DAMPER

23.5RADIANT CEILING PANEL

23.6MECHANICAL SHAFT OPENING

23.7RADIANT FLOOR SLAB SYSTEM

PROJECT STATUS

PRELIMINARY - NOT FOR CONSTRUCTION

ISSUE

1

10/20/2008

30% PRICING

2

11/07/2008

30% DESIGN REVISION

3

12/12/2008

60% INTERNAL QA/QC & COST ESTIMATE

4

12/19/2008

60% PRE-FINAL, NASA REVIEW

5

01/19/2009

60% FINAL ISSUE TO NASA

6

02/16/2009

90% QAQC & COST ESTIMATE

MARK

DATE

DESCRIPTION

DRAWN

S MOSHGGOU

DATE

DESIGNED

WM+P

DATE

CHECKED

R PRADHAN

DATE

PROJ/MGR

DATE

REQUESTOR

DATE

RQA

DATE

SAFETY

DATE

SUPERVISOR

DATE

Ames Research Center

Moffet Field, California

N232 COLLABORATIVE SUPPORT FACILITY

STAIR DETAILS

SIZE

CAGE CODE

A232-0800-

REV

D

25307

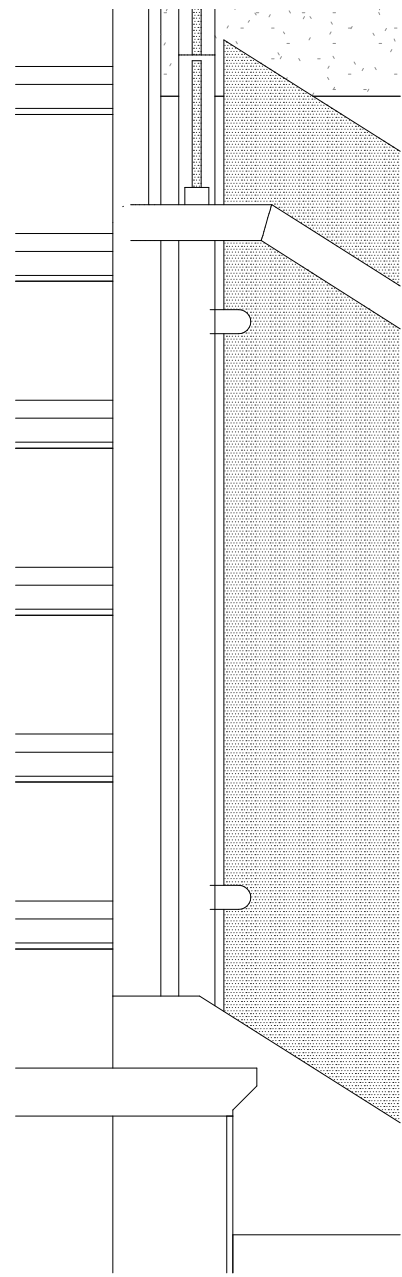
A751

SCALE

INDEX

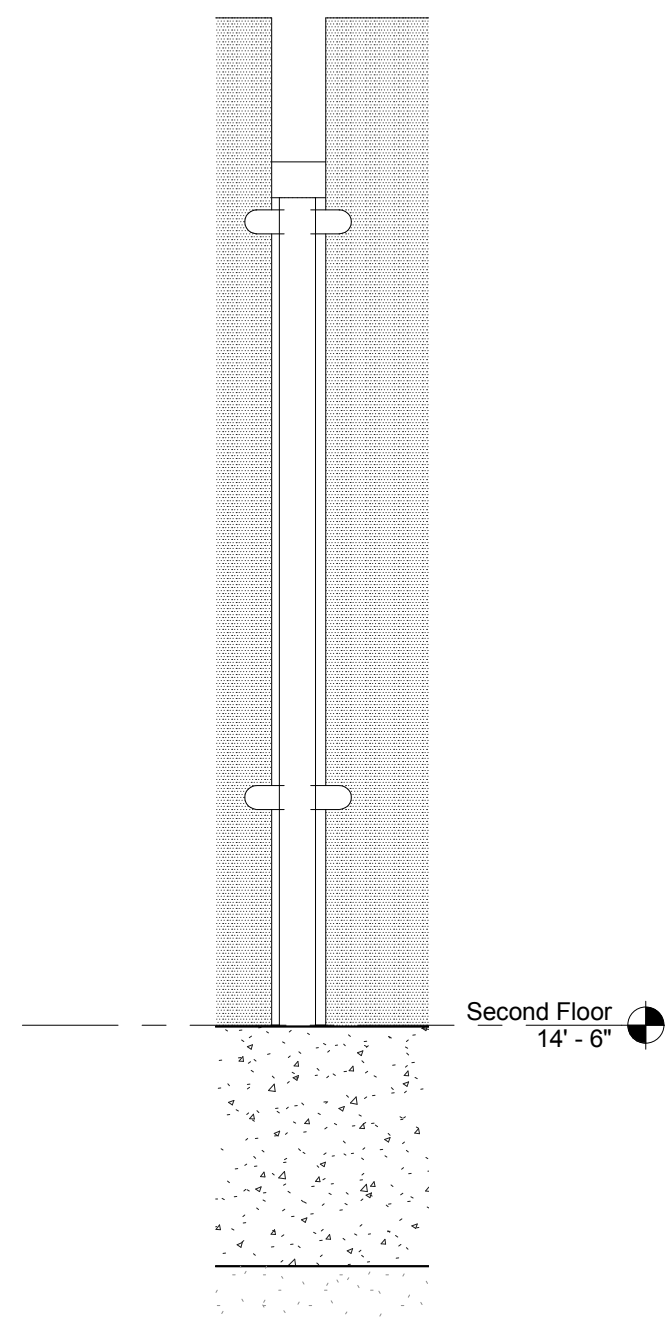
SHEET

OF



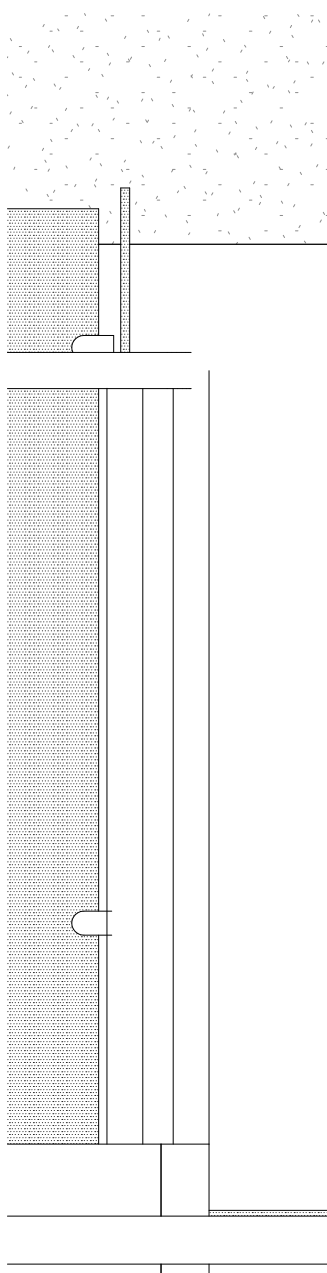
7 | STAIR 1 RAILING @ INTERMEDIATE LANDING

A752 REF: A621 SCALE: 1 1/2" = 1'-0"



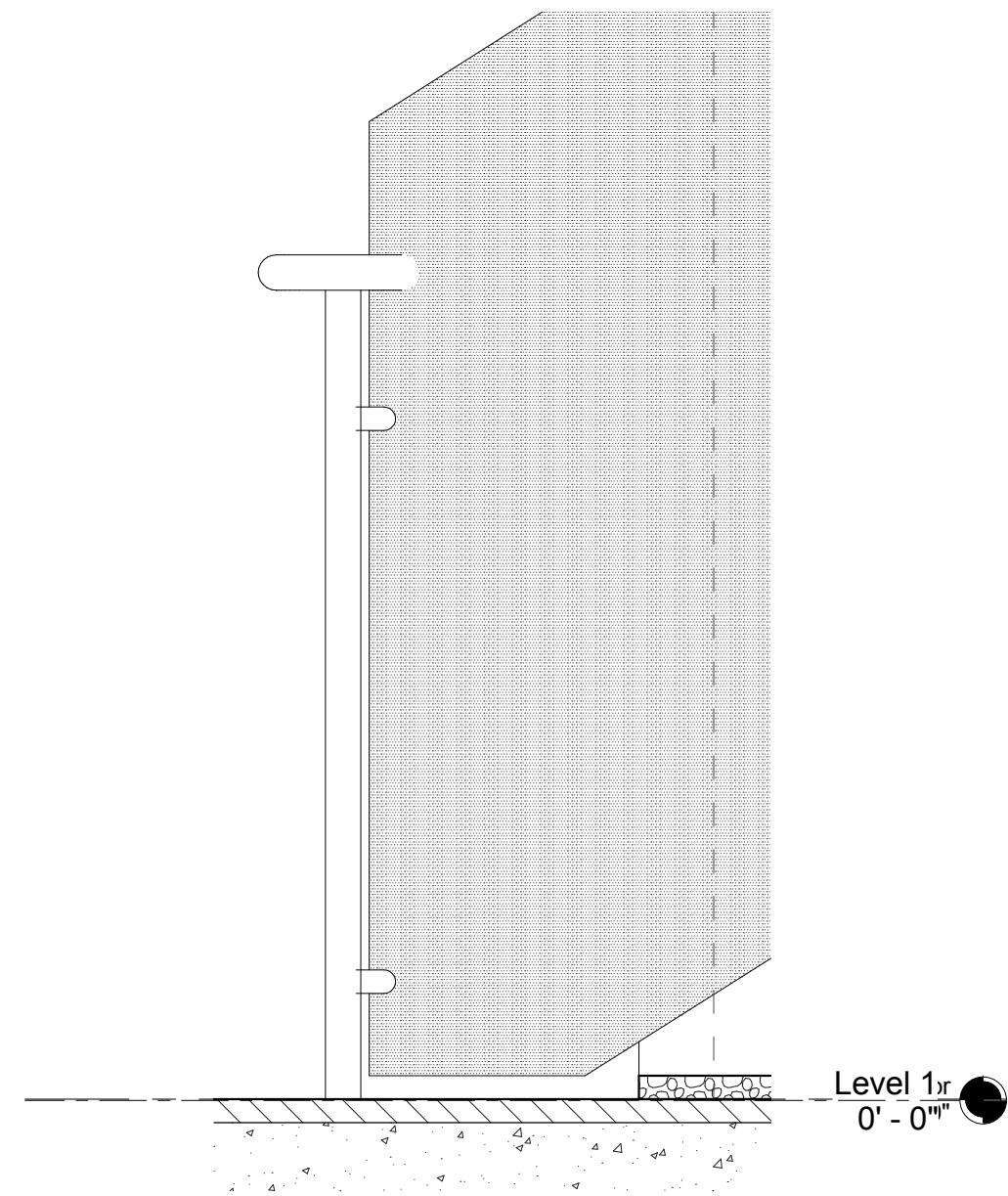
3 | STAIR 1 TYPICAL SIDE MOUNTED RAILING CONNECTION

A752 REF: A621 SCALE: 1 1/2" = 1'-0"



5 | STAIR 1 RAILING @ LANDING

A752 REF: A621 SCALE: 1 1/2" = 1'-0"



1 | STAIR 1 RAILING @ FIRST FLOOR

A752 REF: A624 SCALE: 1 1/2" = 1'-0"

MATERIAL KEYNOTES

<u>DIVISION 03 - CONCRETE</u>		<u>DIVISION 10 - SPECIALTIES</u>	
3.1	CAST IN PLACE CONCRETE	10.1	TOILET PARTITION
3.2	CONC IN RESURFING PAD	10.2	FIXED SUNSCREEN (BIPV @ BID ALTERNATE)
3.3	VAPOR BARRIER	10.3	METAL LOCKER
3.4	GRANULAR FILL	10.4	FIRE EXTINGUISHER CABINET
3.5	CANE DETECTION AREA	10.5	DOOR STOP
		10.6	ALUM LIGHT SHELF (BID ALTERNATE)
<u>DIVISION 05 - METALS</u>		10.7	VINE CABLE SYSTEM
5.1	STEEL BEAM	10.8	EXTRUDED ALUM LOUVER AIRFOIL
5.2	STEEL COLUMN	10.9	NOT USED
5.3	METAL DECK	10.10	ACCESS FLOORING- 10" HIGH

DIVISION 11 - EQUIPMENT
11.1 MOTORIZED PROJECTION SCREEN
11.2 PROJECTOR

DIVISION 12 - FURNISHINGS
12.1 MOTORIZED WINDOW SHADE
12.2 SYSTEM FURNITURE, NIC
12.3 ENTRANCE FLOOR MAT & FRAME

DIVISION 14 - EQUIPMENT
14.1 HYDRAULIC HOLELESS ELEVATOR, 3500 LB

DIVISION 22 - PLUMBING

22.1 ROOF DRAIN
22.2 OVERFLOW SCUPPER
22.3 VENT THROUGH ROOF
22.4 ELECTRIC WATER COOLER

22.3 KITCHEN SINK
22.6 SERVICE SINK
22.7 FLOOR DRAIN
22.8 FILTERED WATER SYSTEM FAUCET
22.9 DUAL FLUSH TOILET @ WOMEN'S
22.10 HIGH EFFICIENCY TOILET @ MEN'S
22.11 LOW CONSUMPTION URINAL
22.12 COUNTERTOP SINK
22.13 ELECTRONIC LAVATORY FAUCET, TYP.
22.14 HAND SHOWER SET WITH SLIDE BAR
22.15 URINAL ELECTRONIC FLUSH VALVE

DIVISION 23 - HVAC

23.1 BOILER FLUE
23.2 DUCT
23.3 PERIMETER HYDRONIC HEATER
23.4 FIRE DAMPER
23.5 RADIANT CEILING PANEL
23.6 MECHANICAL SHAFT OPENING
23.7 RADIANT FLOOR SLAB SYSTEM

DIVISION 08 - OPENINGS

- 8.1 DOOR & FRAME
- 8.2 MOTORIZED OPERABLE WINDOW
- 8.3 MANUAL OPERABLE WINDOW
- 8.4 AUTOMATIC DOOR BOTTOM
- 8.5 THRESHOLD
- 8.6 GLAZED ALUM CURTAIN WALL SYSTEM
- 8.7 1" INSULATED GLAZING
- 8.8 FRITTED GLAZING
- 8.9 SPANDREL GLAZING
- 8.10 VISION GLASS (SAFETY WHERE REQUIRED)
- 8.11 RECYCLED GLAZING
- 8.12 AUTOMATIC ENTRANCE DOOR
- 8.13 SKYLIGHT
- 8.14 WEATHERSTRIPPING
- 8.15 MTL SECURITY GATE
- 8.16 DOOR PULL

DIVISION 09 - FINISHES	
9.1	1/2" GWB TYPE X
9.2	5/8" GWB TYPE X
9.3	1" GWB SHAFT LINER
9.4	20 GA MT, STUD @ 16" O/C
9.5	SLOTTED TOP TRACK
9.6	METAL STUD TRACK
9.7	COLD FORMED FURRING CHANNEL
9.8	SHAFT WALL STUD MIN 20 GA @ 24" O/C
9.9	FRAMING ANGLE, MIN 20 GA, GALV
9.10	FURRING CHANNEL, MIN 20 GA, SIZE AS NOTED
9.11	SHAFT J RUNNER
9.12	CERAMIC TILE
9.13	REINFORCED MORTAR SETTING BED
9.14	SCHEDULED FLOORING
9.15	SUSPENDED POP BOARD CEILING SYSTEM
9.16	SCHEDULED WALL BASE
9.17	PAINT
9.18	5/8" CEMENTITIOUS TILE BACKER BOARD
9.19	5/8" GLASS MAT FACED TILE BACKER BOARD
9.20	NOT USED
9.21	SOUND ATTENUATION BLANKET
9.22	ACOUSTICAL INSULATION 3" (UON)
9.23	SUSPENDED ACOUSTICAL CEILING

PROJECT STATUS

PRELIMINARY - NOT FOR CONSTRUCTION

ISSUE		
1	10/20/2008	30% PRICING
2	11/07/2008	30% DESIGN REVISION
3	12/12/2008	60% INTERNAL QA/QC & COST ESTIMATE
4	12/19/2008	60% PRE-FINAL, NASA REVIEW
5	01/19/2009	60% FINAL ISSUE TO NASA
6	02/16/2009	90% QAQC & COST ESTIMATE

MARK	DATE	DESCRIPTION			
DRAWN	DATE	 Ames Research Center Moffett Field, California			
S MOSHGGOU	DATE				
DESIGNED	DATE	N232 COLLABORATIVE SUPPORT FACILITY STAIR DETAILS			
WM+P	DATE				
CHECKED	DATE	<div> <div>SIZE</div> <div>CAGE CODE</div> </div> <div> <div>A232-0800-</div> <div>A752</div> </div> <div>REV</div>			
R PRADHAN	DATE				
PROMGR	DATE	<div> <div>SCALE</div> <div>INDEX</div> </div> <div> <div>SHEET</div> <div>OF</div> </div>			
REQUESTOR	DATE				
RAQA	DATE				
SAFETY	DATE				
SUPERVISOR	DATE				

Technical drawing of a wall track assembly. The drawing shows a cross-section of a wall with a track system. Key components and dimensions include:

- Top Section:** (2) #10 SMS, SEE DET 5/A-404. Dimension: 1/2".
- Sealant:** SEALANT, FR JOINT SPRAY.
- Fire Safing:** FIRE SAFING INSULATION @ RATED WALLS.
- Track System:** TYPE "S" SCREWS @ 12" O/C (UNO) #8 WAFFERHEAD. (2 LAYERS).
- Dimensions:** 1/2" MIN. 1 3/4" MAX., 1/2", 1 1/2", DEFLECTION GAP 1/4".
- Notes:** 5/8" WHERE OCCURS, WHERE OCCURS.
- References:** INSTALL PER ICC ESR-1042, SEE WALL TYPES.
- Callouts:** 3.1, 5.3, 9.5, 9.4, 9.2, 7.6.

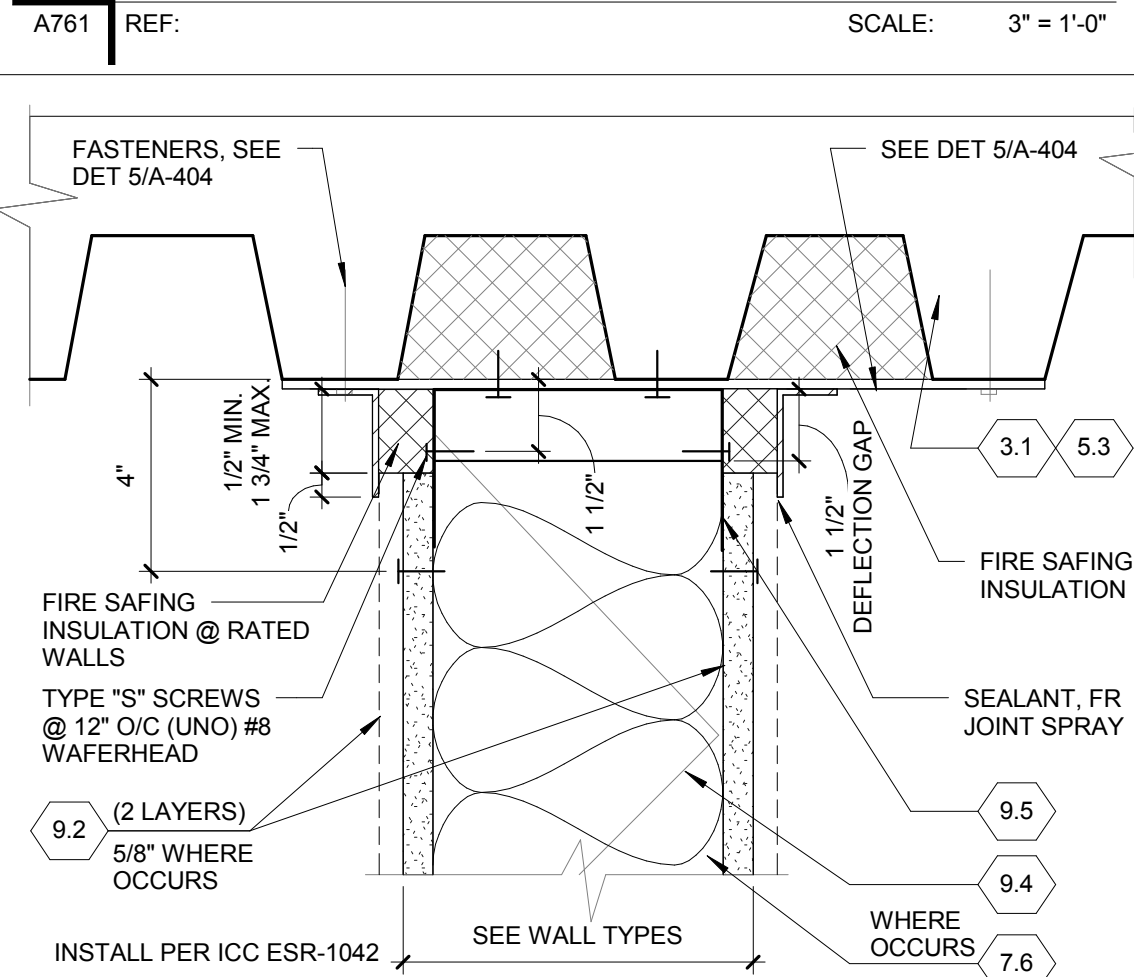
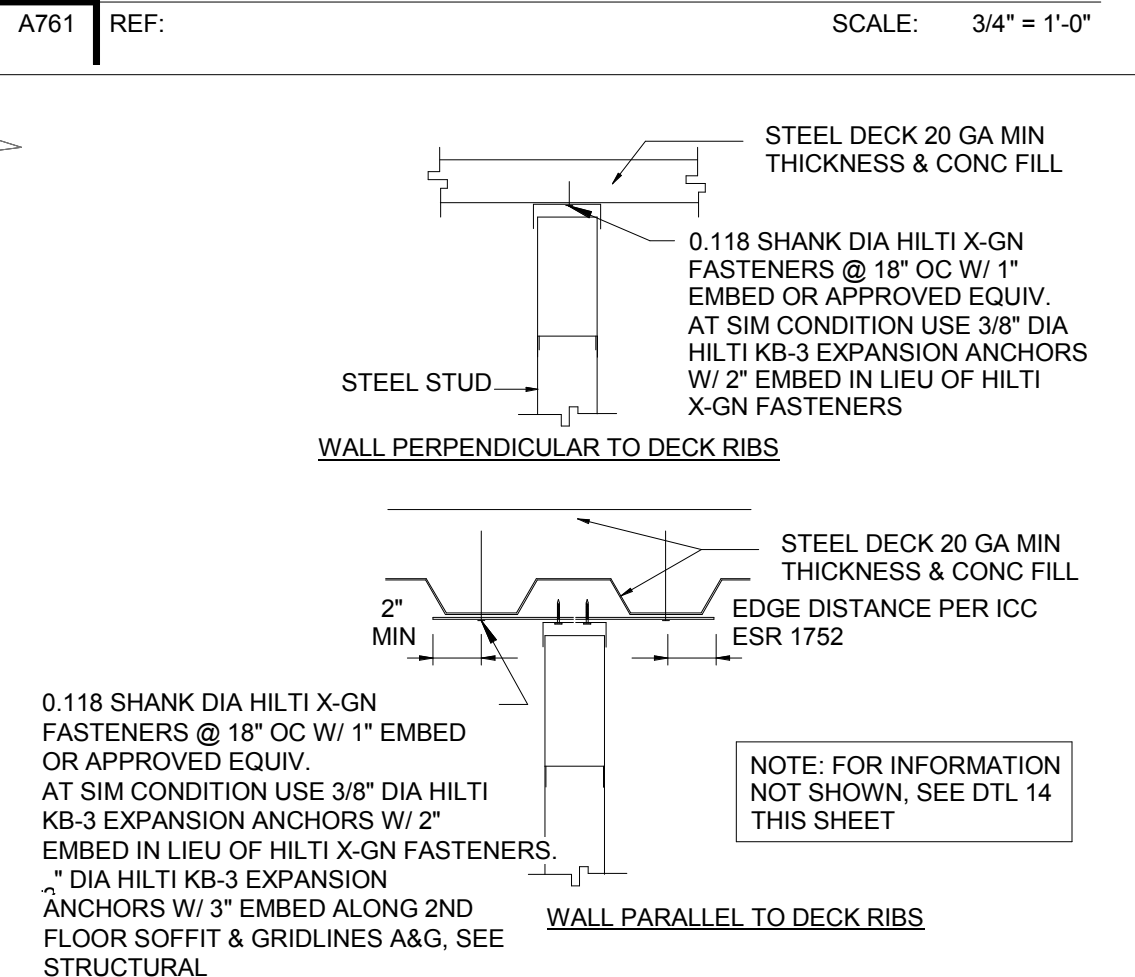
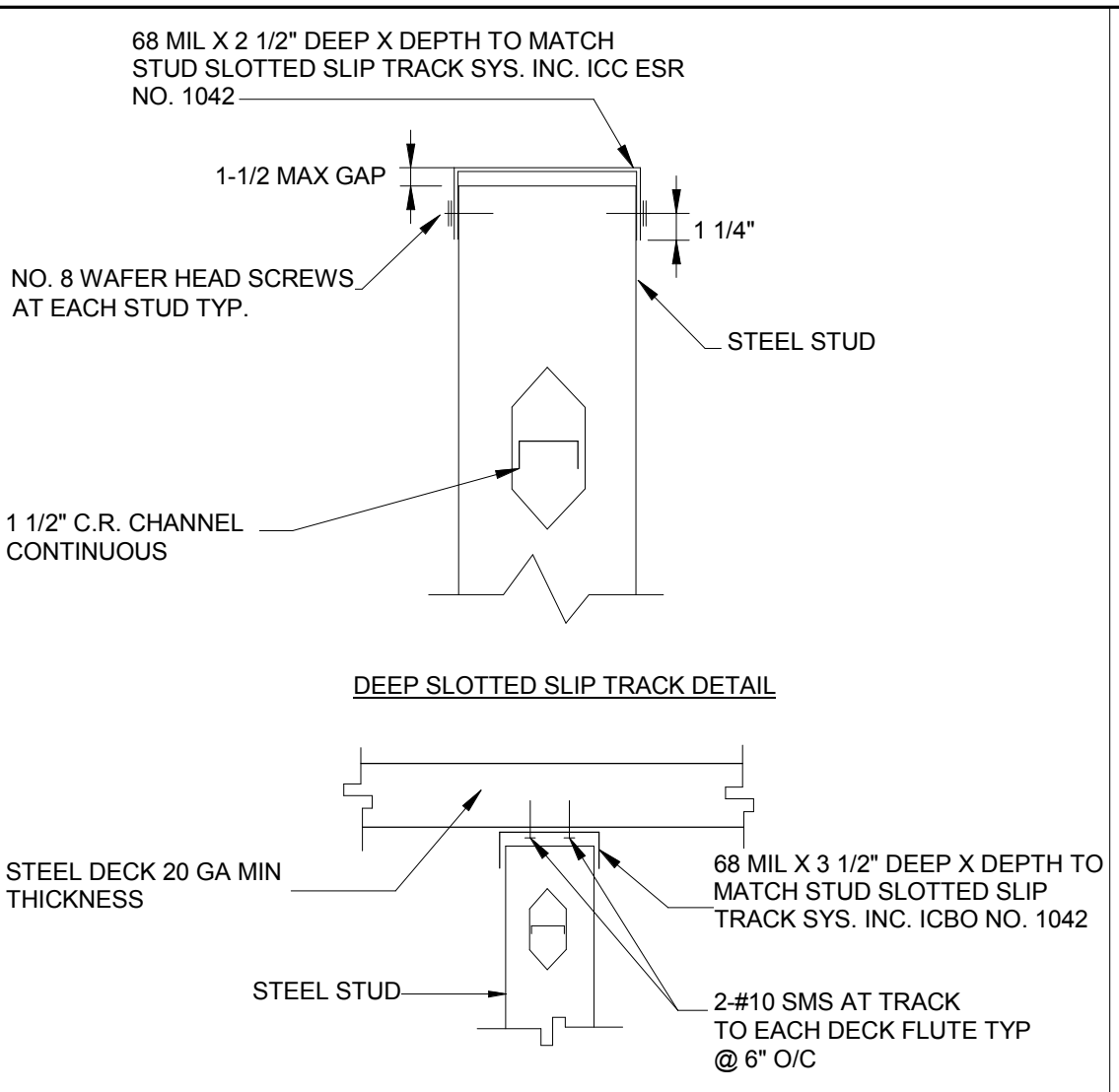
[illegible]

Diagram illustrating the connection of a grab bar to a wall. The grab bar is shown attached to a wall with a backing plate. The connection is detailed with a 1" typical dimension for the gap between the wall and the grab bar flange. The diagram is labeled "GRAB BAR ATTACHMENT" and "BACKING PLATE". The scale is 1/2" = 1'-0".



WALL PERPENDICULAR TO STEEL DECK FLUTES

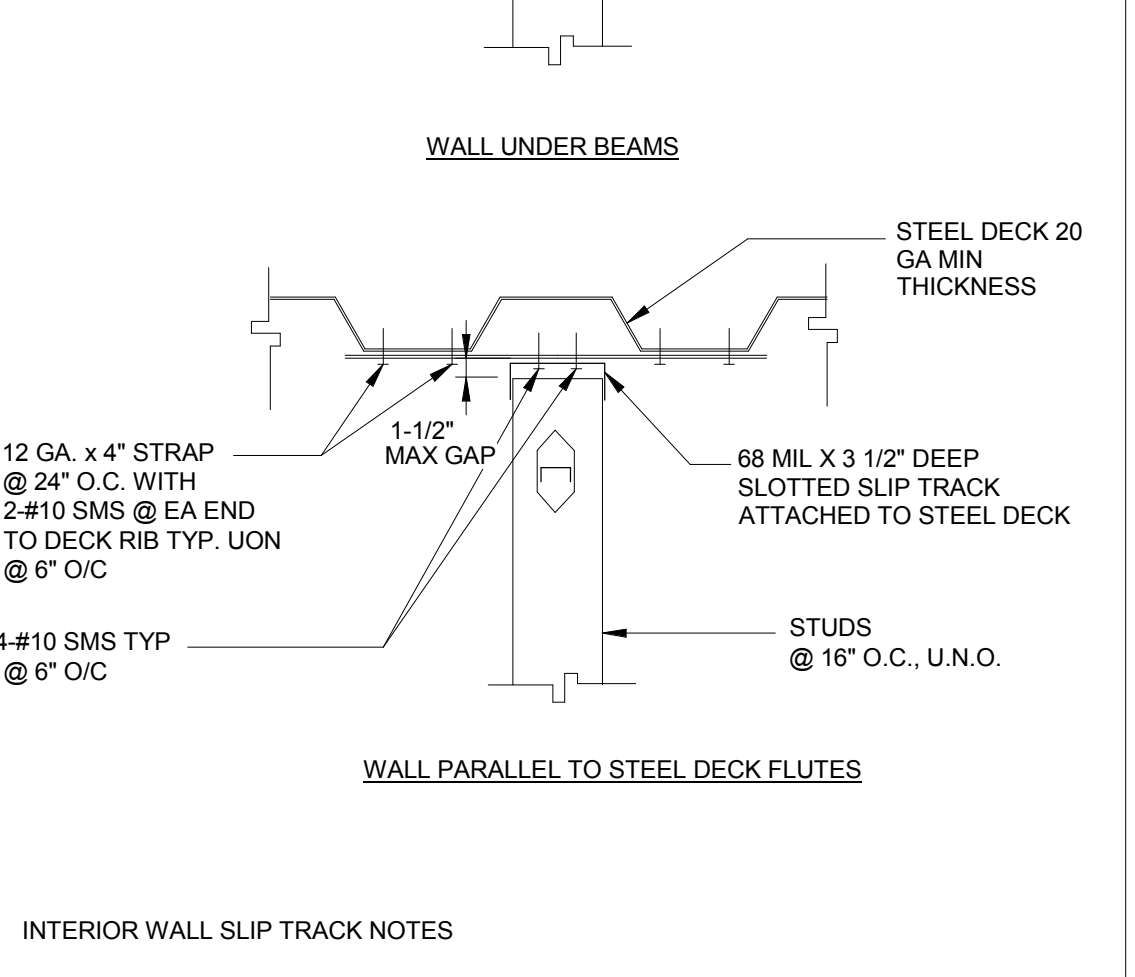
STEEL DECK

0.118 DIA HILTI X-EGN FASTENERS
@ 8" O.C. PER ICC ESR-1752
REFER TO MANUFACTURER'S
WRITTEN INSTRUCTIONS FOR
LENGTH OF FASTENER BASED
ON BASE METAL THICKNESS

1-1/2" MAX GAP

68 MIL X 2 1/2" DEEP SLOTTED
SLIP TRACK ATTACHED
TO STRUCTURE

STEEL STUD



1. THE PURPOSE OF THIS DETAIL IS TO ALLOW FOR VERTICAL MOVEMENT DUE TO DEFLECTION.

2. PROVIDE 1-1/2" GAP IN ARCHITECTURAL FINISH AT TOP OF WALL.

3. MINIMUM YIELD STRENGTH OF TRACK IS 33 KSI.

4. SUBSTITUTE WELDS INDICATED FOR SCREWS IF FLANGE THICKNESS EXCEEDS 1/2".

WHEN TRACK IS ATTACHED DIRECTLY TO STUD FLANGE, A STANDARD No. 6x7/16" PAN HEAD SHEET METAL SCREW MAY BE USED. WHEN DRY-WALL COVERING TRACK AND STUD FLANGES ARE ATTACHED AT SAME TIME, A STANDARD (MIN.) 1" LONG DRYWALL SCREW MAY BE USED. ANY COMBINATION OF THE ABOVE METHODS MAY BE USED IN THE ERECTION OF A COMPLETED WALL ASSEMBLY.

WALL STUDS NO PUNCH OUT WITHIN 12" FROM END OF STUDS

SCREW ATTACHMENT

0.118 SHANK DTA HILTI X-GN FASTENERS @ 6" OC W/ 3/4" EMBED OR APPROVED EQUIV.

WALL AT CONCRETE FLOOR

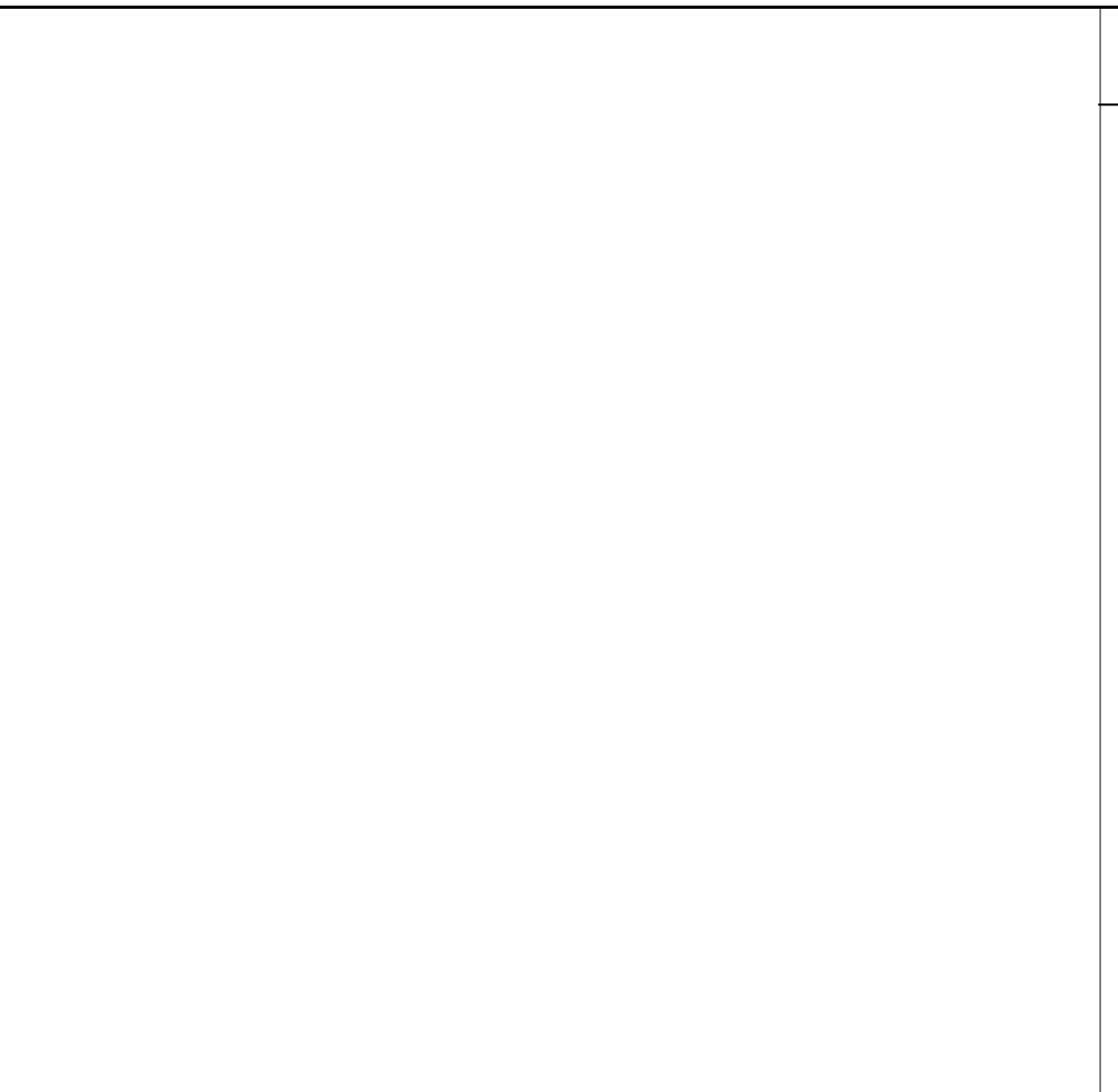


Diagram illustrating the elevation view of a door frame assembly, showing various components and dimensions:

- ADDITIONAL CONNECTIONS AT JAMB, STUDS T & B (TYPICAL) SEE NOTE 4**
- STUDS @ 16" O.C. TYPICAL PUNCHED**
- 10'-0" MAX** (Dimension for opening width)
- OPENING WIDTH**
- 10'-0" MAX** (Dimension for opening width)
- OPENING WIDTH**
- HEADER, SEE SCHEDULE BELOW**
- ADD STUD BLOCKING ONE BAY AT DOOR HINGE AND STRIKERS**
- TOP TRACK**
- BRIDGING @ 4'-0" O.C. MAXIMUM (TYPICAL)**
- 12" MAX. FOR ANCHOR BOLTS, 6" MAX. FOR SHOT PINS.**
- CONT. SILL TRACK**
- JAMB STUDS**
- BOTTOM TRACK**

HEADER AND JAMB SCHEDULE			
OPENING WIDTH	HEADER DESIGNATION (UNPUNCHED)	C-STUD JAMB DESIGNATION	REMARKS
UP TO 6'-4"	2-400S200-54	2-400S200-54	
UP TO 11'-4"	2-600S200-54	2-600S200-54	MIN. 6" WALL STUDS

NOTES:

1. FOR OPENING SIZES AND LOCATIONS SEE ELEVATIONS
2. FOR HEADER AND JAMB SIZES SEE SCHEDULE.
3. USE 16 GAGE MINIMUM JAMB STUDS.
4. AT TOP & BOTTOM OF JAMB STUDS, PROVIDE ADDITIONAL CONNECTIONS EQUAL TO ONE-HALF OF CONNECTIONS REQUIRED ALONG OPENING WIDTH PLUS ONE.
5. FOR OPENINGS WIDER THAN INDICATED, SEE DTL 17/S-303

2 ELEVATION

SCALE: 12" = 1'-0"

1. ALL STUD WALLS EXTENDING FROM FLOOR TO UNDERSIDE OF EXIST ROOF ABOVE SHALL HAVE A SLIP JOINT AT THE TOP OF THE WALL

2. TYPICAL WALL STUDS ARE 33ksi, AND JAMB STUDS ARE 33ksi UNPUNCHED U.N.O.

3. LOW VELOCITY POWER DRIVEN FASTENERS ARE HILTI X-GN & X-EGN UNON (ICC ESR-1752) OR EQUAL, WITH 1" MINIMUM EMBEDMENT INTO CONCRETE & STEEL TYP. UNON.

4. SHEET METAL SCREWS (SMS) ARE #10 TYP UNON, EDGE DISTANCE SHALL BE PER ICC ESR-4943P

5. FILLET WELD SIZES FOR COLD FORMED STEEL FRAMING ARE 1/8" TYP. UNON.

6. MINIMUM YIELD STRENGTH OF COLD FORMED STEEL 33ksi, TYP. UNON.

7. CONTINUOUS LATERAL SUPPORT IS REQUIRED FOR EACH FLANGE OF EACH WALL STUD AND JOIST. ALL STUD AND JOIST FLANGES WITHOUT FACING MATERIAL CONFORMING WITH THESE REQUIREMENTS SHALL HAVE CONTINUOUS CRC BRIDGING OR STRAP BRIDGING AT 4'-0" O.C. MAXIMUM, PER STRUCTURAL

9. ANY ADDITIONAL BRIDGING THAT MAY BE REQUIRED FOR STABILITY DURING CONSTRUCTION IS THE RESPONSIBILITY OF THE CONTRACTOR.

9. SSMA NOMENCLATURE IS USED TO PROVIDE LIGHT GAU FRAMING INFORMATION. ALL LIGHT GAU FRAMING MUST ADHERE TO ICC ESR-4943P & HAVE SECTION PROPERTIES EQUIV. TO THESE INDICATED IN THIS REPORT MIN THICKNESS=54 MILS.

LEGEND:

(DEPTH "A") 600 S 200 - 33 (FLANGE "B")

400 = 4" S = STUD OR JOIST 200 = 2" 33 = 20 GA



MATERIAL KEYNOTES

3.1

DIVISION 03 - CONCRETE

3.2

1 CAST IN PLACE CONCRETE

3.2

6" CONC HOUSEKEEPING PAD

3.3

VAPOR BARRIER

3.4

GRANULAR FILL

3.5

CANE DETECTION AREA

5.1

DIVISION 05 - METALS

5.1

STEEL BEAM

5.2

STEEL COLUMN

5.3

METAL DECK

5.4

STEEL ANGLE

5.5

STEEL PLATE

5.6

TUBULAR STEEL

5.7

STEEL BENT PLATE

5.8

STAINLESS STEEL FRAME

5.9

OPEN WEB STEEL JOIST

5.10

NOT USED

5.11

EXT. COLD FORMED METAL FRAMING, SEE STRUCT.

5.12

NOT USED

5.13

GUARDRAIL

5.14

HANDRAIL

5.15

METAL FRAMED STAIR

5.16

TEEL CHANNEL

5.17

VISUALLY CONTRASTING STAINLESS STEEL STRIP, SEE SHEET 1/A002 FOR ACCESSIBILITY REQUIREMENTS

DIVISION 06 - WOOD, PLASTIC & COMPOSITES

6.1

WOOD BLOCK/NAILER, PRESSURE TREATED

6.2

3/4" PLYWOOD, FIRE RETARDANT TREATED

6.3

5/8" GLASS MAT FACED GYP SHEATHING

6.4

PLASTIC LAMINATE

6.5

SOLID-SURFACING MATERIAL COUNTERTOP

6.6

RECYCLED WOOD TREAD

DIVISION 07 - THERMAL & MOISTURE PROTECTION

7.1

STAINLESS STEEL FLASHING/COUNTERFLASHING

7.2

THERMOPLASTIC MEMBRANE ROOFING

7.3

MEMBRANE EDGE FASTENER @ 12" O/C

7.4

SAND COATED ROOF WALKWAY

7.5

RIGID ROOF INSULATION OF AGED R=30 (UON)

7.6

BATT INSULATION R=19

7.7

PVC MEMBRANE FLASHING

7.8

EXTRUDED ALUM TRIM

7.9

ALUM FLASHING

7.10

FORMED SHEET SS COPING

7.11

BELOW GRADE DAMP/WATERPROOFING

7.12

SEALANT WITH BACKER ROD

7.13

20 GA GALVANIZED SPLASH PAN

7.14

DOWN SPOUT

7.15

WATERPROOFING MEMBRANE

7.16

INSULATED METAL PANEL CLADDING

7.17

ROOF SEISMIC JOINT COVER

7.18

EXTERIOR WALL SEISMIC JOINT COVER

7.19

INTERIOR WALL SEISMIC JOINT COVER

7.20

CEILING SEISMIC JOINT COVER

7.21

FIRESTOPPING

7.22

SAND COATED ROOF WALKWAY

7.23

METAL SPANDREL PANEL (INSULATED)

7.24

THERMOPLASTIC MEMBRANE PARAPET FLASHING

7.25

THERMOPLASTIC MEMBRANE COVER STRIP, HOT-AIR WELDED

7.26

EXTRUDED ALUM BAR W/ FASTENERS @ 12" O.C. MAX

7.27

FLOOR SEISMIC JOINT COVER

7.28

S.S. PERFORATED RIBBED METAL (20 GA)

7.29

METAL PANEL SOFFIT

DIVISION 08 - OPENINGS

8.1

DOOR & FRAME

8.2

MOTORIZED OPERABLE WINDOW

8.3

MANUAL OPERABLE WINDOW

8.4

AUTOMATIC DOOR BOTTOM

8.5

THRESHOLD

8.6

GLAZED ALUM CURTAIN WALL SYSTEM

8.7

1" INSULATED GLAZING

8.8

FRITTED GLAZING

8.9

SPANDREL GLAZING

9.0

VISION GLASS (SAFETY WHERE REQUIRED)

9.1

RECYCLED GLAZING

9.2

AUTOMATIC ENTRANCE DOOR

9.3

SKYLIGHT

9.4

WEATHERSTRIPPING

9.5

MTL SECURITY GATE

9.6

DOOR PULL

DIVISION 09 - FINISHES

9.1

1/2" GWB TYPE X

9.2

5/8" GWB TYPE X

9.3

1" GWB SHAFT LINER

9.4

20 GA MTL STUD @ 16" O/C

9.5

SLOTTED TOP TRACK

9.6

METAL STUD TRACK

9.7

COLD FORMED FURRING CHANNEL

9.8

SHFT WALL STUD MIN 20 GA @ 24" O/C

9.9

FRAMING ANGLE, MIN 20 GA GAL V

9.10

FURRING CHANNEL MIN 20 GA, SIZE AS NOTED

9.11

SHFT J RUNNER

9.12

CERAMIC TILE

9.13

REINFORCED MORTAR SETTING BED

9.14

SCHEDULED FLOORING

9.15

SUSPENDED GYP BOARD CEILING SYSTEM

9.16

SCHEDULED WALL BASE

9.17

PAINT

9.18

5/8" CEMENTITIOUS TILE BACKER BOARD

9.19

5/8" GLASS MAT FACED TILE BACKER BOARD

9.20

NOT USED

9.21

SOUND ATTENUATION BLANKET

9.22

ACOUSTICAL INSULATION 3" (UON)

9.23

SUSPENDED ACOUSTICAL CEILING

DIVISION 10 - SPECIALTIES

10.1

TOILET PARTITION

10.2

FIXED SUNSCREEN (BIPV @ BID ALTERNATE)

10.3

METAL LOOKER

10.4

FIRE EXTINGUISHER CABINET

10.5

DOOR STOP

10.6

ALUM LIGHT SHELF (BID ALTERNATE)

10.7

VINE CABLE SYSTEM

10.8

EXTRUDED ALUM LOUVER AIRFOIL

10.9

NOT USED

10.10

ACCESS FLOORING- 10" HIGH

DIVISION 11 - EQUIPMENT

11.1

MOTORIZED PROJECTION SCREEN

11.2

PROJECTOR

DIVISION 12 - FURNISHINGS

12.1

MOTORIZED WINDOW SHADE

12.2

SYSTEM FURNITURE, NIC

12.3

ENTRANCE FLOOR MAT & FRAME

DIVISION 14 - EQUIPMENT

14.1

HYDRAULIC HOLELESS ELEVATOR, 3500 LB

DIVISION 22 - PLUMBING

22.1

ROOF DRAIN

22.2

OVERFLOW SCUPPER

22.3

VENT THROUGH ROOF

22.4

ELECTRIC WATER COOLER

22.5

KITCHEN SINK

22.6

SERVICE SINK

22.7

FLOOR DRAIN

22.8

FILTERED WATER SYSTEM FAUCET

22.9

DUAL FLUSH TOILET @ WOMEN'S

22.10

HIGH EFFICIENCY TOILET @ MEN'S

22.11

LOW CONSUMPTION URINAL

22.12

COUNTERTOP SINK

22.13

ELECTRONIC LAVATORY FAUCET, TYP

22.14

HAND SHOWER SET WITH SLIDE BAR

22.15

URINAL, ELECTRONIC FLUSH VALVE

DIVISION 23 - HVAC

23.1

BOILER FLUE

23.2

DUCT

23.3

PERIMETER HYDRONIC HEATER

23.4

FIRE DAMPER

23.5


RADIANT CEILING PANEL

23.6

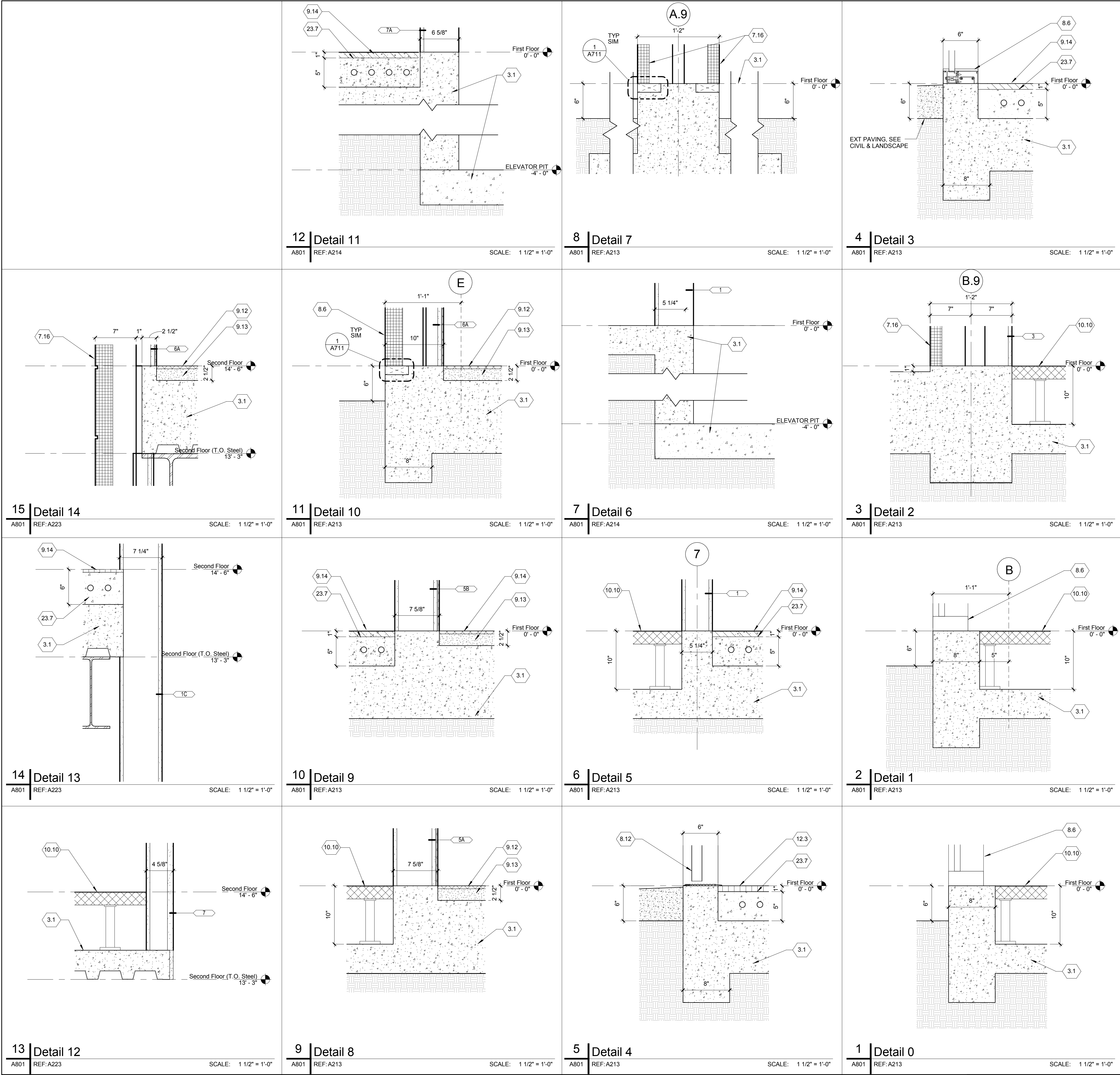
MECHANICAL SHUT OPENING

23.7

RADIANT FLOOR SLAB SYSTEM

PROJECT STATUS									
PRELIMINARY - NOT FOR CONSTRUCTION									
ISSUE									
1		10/20/2008	30% PRICING						
2		11/07/2008	30% DESIGN REVISION						
3		12/12/2008	60% INTERNAL QA/QC & COST ESTIMATE						
4		12/19/2008	60% PRE-FINAL, NASA REVIEW						
5		01/19/2009	60% FINAL ISSUE TO NASA						
6		02/16/2009	90% QAQC & COST ESTIMATE						
MARK		DATE	DESCRIPTION						
DRAWN	G JOHNSON	DATE	 <p>Ames Research Center Moffet Field, California</p> <p>N232 COLLABORATIVE SUPPORT FACILITY</p> <p>INTERIOR NON-LOAD BEARING LIGHT GAGE STEEL FRAMING</p>						
DESIGNED	WM+P	DATE							
CHECKED	R PRADHAN	DATE							
PROJECTOR		DATE							
REQUESTOR		DATE							
R&GA		DATE							
SAFETY		DATE							
SUPERVISOR		DATE							
		SIZE	GAGE CODE		A232-0800-		A761		REV
		SCALE	25307		INDEX		SHEET		OF

2/16/2009 6:16:35 PM



MATERIAL KEYNOTES

- DIVISION 03 - CONCRETE

3.1 CAST IN PLACE CONCRETE

3.2 6" CONC HOUSEKEEPING PAD

3.3 VAPOR BARRIER

3.4 GRANULAR FILL

3.5 CANE DETECTION AREA
- DIVISION 05 - METALS

5.1 STEEL BEAM

5.2 STEEL COLUMN

5.3 METAL DECK

5.4 STEEL ANGLE

5.5 STEEL PLATE

5.6 TUBULAR STEEL

5.7 STEEL BENT PLATE

5.8 STAINLESS STEEL FRAME

5.9 OPEN WEB STEEL JOIST

5.10 NOT USED

5.11 EXT. COLD FORMED METAL FRAMING, SEE STRUCT.

5.12 NOT USED

5.13 GUARDRAIL

5.14 HANDRAIL

5.15 METAL FRAMED STAIR

5.16 TEEL CHANNEL

5.17 VISUALLY CONTRASTING STAINLESS STEEL STRIP, SEE SHEET 1/A002 FOR ACCESSIBILITY REQUIREMENTS
- DIVISION 06 - WOOD, PLASTIC & COMPOSITES

6.1 WOOD BLOCK/NAILER, PRESSURE TREATED

6.2 3/4" PLYWOOD, FIRE RETARDANT TREATED

6.3 5/8" GLASS MAT FACED GYP SHEATHING

6.4 PLASTIC LAMINATE

6.5 SOLID-SURFACING MATERIAL COUNTERTOP

6.6 RECYCLED WOOD TREAD
- DIVISION 07 - THERMAL & MOISTURE PROTECTION

7.1 STAINLESS STEEL FLASHING/COUNTERFLASHING

7.2 THERMOPLASTIC MEMBRANE ROOFING

7.3 MEMBRANE EDGE FASTENER @ 12" O/C

7.4 SAND COATED ROOF WALKWAY

7.5 RIGID ROOF INSULATION OF AGED R=30 (UON)

7.6 BATT INSULATION R=19

7.7 PVC MEMBRANE FLASHING

7.8 EXTRUDED ALUM TRIM

7.9 ALUM FLASHING

7.10 FORMED SHEET SS COPING

7.11 BELOW GRADE DAMP/WATERPROOFING

7.12 SEALANT WITH BACKER ROD

7.13 20 GA GALVANIZED SPLASH PAN

7.14 DOWN SPOUT

7.15 WATERPROOFING MEMBRANE

7.16 INSULATED METAL PANEL CLADDING

7.17 ROOF SEISMIC JOINT COVER

7.18 EXTERIOR WALL SEISMIC JOINT COVER

7.19 INTERIOR WALL SEISMIC JOINT COVER

7.20 CEILING SEISMIC JOINT COVER

7.21 FIRESTOPPING

7.22 SAND COATED ROOF WALKWAY

7.23 METAL SPANDREL PANEL (INSULATED)

7.24 THERMOPLASTIC MEMBRANE PARAPET FLASHING

7.25 THERMOPLASTIC MEMBRANE COVER STRIP, HOT-AIR WELDED

7.26 EXTRUDED ALUM BAR W/ FASTENERS @ 12" O.C. MAX

7.27 FLOOR SEISMIC JOINT COVER

7.28 S.S. PERFORATED RIBBED METAL (20 GA)

7.29 METAL PANEL SOFFIT
- DIVISION 08 - OPENINGS

8.1 DOOR & FRAME

8.2 MOTORIZED OPERABLE WINDOW

8.3 MANUAL OPERABLE WINDOW

8.4 AUTOMATIC DOOR BOTTOM

8.5 THRESHOLD

8.6 GLAZED ALUM CURTAIN WALL SYSTEM

8.7 1" INSULATED GLAZING

8.8 FRITTED GLAZING

8.9 SPANDREL GLAZING

8.10 VISION GLASS (SAFETY WHERE REQUIRED)

8.11 RECYCLED GLAZING

8.12 AUTOMATIC ENTRANCE DOOR

8.13 SKYLIGHT

8.14 WEATHERSTRIPPING

8.15 MTL SECURITY GATE

8.16 DOOR PULL
- DIVISION 09 - FINISHES

9.1 1/2" GWB TYPE X

9.2 5/8" GWB TYPE X

9.3 1" GWB SHAFT LINER

9.4 20 GA MTL STUD @ 16" O/C

9.5 SLOTTED TOP TRACK

9.6 METAL STUD TRACK

9.7 COLD FORMED FURRING CHANNEL

9.8 SHAFT WALL STUD MIN 20 GA @ 24" O/C

9.9 FRAMING ANGLE, MIN 20 GA GALV

9.10 FURRING CHANNEL MIN 20 GA, SIZE AS NOTED

9.11 SHAFT J RUNNER

9.12 CERAMIC TILE

9.13 REINFORCED MORTAR SETTING BED

9.14 SCHEDULED FLOORING

9.15 SUSPENDED GYP BOARD CEILING SYSTEM

9.16 SCHEDULED WALL BASE

9.17 PAINT

9.18 5/8" CEMENTITIOUS TILE BACKER BOARD

9.19 5/8" GLASS MAT FACED TILE BACKER BOARD

9.20 NOT USED

9.21 SOUND ATTENUATION BLANKET

9.22 ACOUSTICAL INSULATION 3" (UON)

9.23 SUSPENDED ACOUSTICAL CEILING
- DIVISION 10 - SPECIALTIES

10.1 TOILET PARTITION

10.2 FIXED SUNSCREEN (BIPV @ BID ALTERNATE)

10.3 METAL LOCKER

10.4 FIRE EXTINGUISHER CABINET

10.5 DOOR STOP

10.6 ALUM LIGHT SHELF (BID ALTERNATE)

10.7 VINE CABLE SYSTEM

10.8 EXTRUDED ALUM LOUVER AIRFOIL

10.9 NOT USED

10.10 ACCESS FLOORING- 10" HIGH
- DIVISION 11 - EQUIPMENT

11.1 MOTORIZED PROJECTION SCREEN

11.2 PROJECTOR
- DIVISION 12 - FURNISHINGS

12.1 MOTORIZED WINDOW SHADE

12.2 SYSTEM FURNITURE, NIC

12.3 ENTRANCE FLOOR MAT & FRAME
- DIVISION 14 - EQUIPMENT

14.1 HYDRAULIC HOLELESS ELEVATOR, 3500 LB
- DIVISION 22 - PLUMBING

22.1 ROOF DRAIN

22.2 OVERFLOW SCUPPER

22.3 VENT THROUGH ROOF

22.4 ELECTRIC WATER COOLER

22.5 KITCHEN SINK

22.6 SERVICE SINK

22.7 FLOOR DRAIN

22.8 FILTERED WATER SYSTEM FAUCET

22.9 DUAL FLUSH TOILET @ WOMEN'S

22.10 HIGH EFFICIENCY TOILET @ MEN'S

22.11 LOW CONSUMPTION URINAL

22.12 COUNTERTOP SINK

22.13 ELECTRONIC LAVATORY FAUCET, TYP.

22.14 HAND SHOWER SET WITH SLIDE BAR

22.15 URINAL ELECTRONIC FLUSH VALVE
- DIVISION 23 - HVAC

23.1 BOILER FLUE

23.2 DUCT

23.3 PERIMETER HYDRONIC HEATER


23.4 FIRE DAMPER

23.5 RADIANT CEILING PANEL

23.6 MECHANICAL SHAFT OPENING

23.7 RADIANT FLOOR SLAB SYSTEM

PRELIMINARY - NOT FOR CONSTRUCTION

ISSUE							
1	10/20/2008	30% PRICING					
2	11/07/2008	30% DESIGN REVISION					
3	12/12/2008	60% INTERNAL QA/QC & COST ESTIMATE					
4	12/19/2008	60% PRE-FINAL, NASA REVIEW					
5	01/19/2009	60% FINAL ISSUE TO NASA					
6	02/16/2009	90% QAQC & COST ESTIMATE					
MARK	DATE	DESCRIPTION					
DRAWN	G JOHNSON	DATE	<div><div>Ames Research Center Moffet Field, California</div><div>N232 COLLABORATIVE SUPPORT FACILITY</div><div>EDGE OF SLAB & CURB DETAILS</div></div>				
DESIGNED	WM + P	DATE					
CHECKED	R PRADHAN	DATE					
PROJUMGR		DATE					
REQUESTOR		DATE					
R&GA		DATE					
SAFETY		DATE					
SUPERVISOR		DATE					
			SIZE	CAGE CODE	A232-0800-	A801	REV
			D	25307			
			SCALE	INDEX	SHEET	OF	

